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THE

BRITISH COLONIES,

Their History, Extent, Condition, and Resources.

BY R. MONTGOMERY MARTIN, ESQ.

Sir,

97 and 100, St. John Street, London.

We have the honour to submit for your perusal the accompanying Prospectus of a National Work on the Extent, Condition, and Resources of the Colonies, which has been undertaken in the hope that an extended knowledge of the value of our vast dominions would essentially promote the public good, not only in pointing out the best field for the profitable employment of our surplus population, but also the most lucrative market for our manufactures.

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LEE, T., Merchant and Manufacturer, 5, George-yard, Lombard-street, and Birmingham.

LEMON (Brothers), Coffee Merchants and Tea Importers, 12, Clerkenwell-close.

LEVESQUE, EDMENDES, & Co., Patent Pianoforte Makers, 40, Cheapside.

LEVICK, (Brothers), Merchants, 9, King's Arms-yard, Coleman-street.

LEWIS & PEAT, Ivory, Drug, and Colonial Brokers, 11, Mincing-lane.

LEWIS, D., Grocers' Tea Canister and Fancy Tea Box and Vase Manufacturer, and General Indian Japanner, 11, Coppice Row, Clerkenwell.

LINDSEY, W. S. 11, Abchurch-lane, Ship and Insurance Agent.

LOADER, J., Export Upholsterer, 23, Pavement, Finsbury.

LOCKYER, J., Metal, Steel, Wire, and Tool Warehouse, 23, St. John's-square, Clerkenwell.

LORD, C., Outfitter, &c., 37, Redcross-street, Cripplegate.

LOUGH, LEWIS & Co., Gum, Drug, Drysaltery, and Colonial Merchants, 20A, Great St. Helen's.

LUCKIE, (Brothers), & Co., Ship and Insurance Brokers and Merchants, 1 and 2, Fenchurch-street.

MACKLEY, T. C., Heel Ball and Ink Manufacturer, Wholesale Dealer in Grindery, Gutta Percha, Shoe Tips, Nails, Thread, &c., 6 and 7, New Inn-yard, Shoreditch.

MAGNUS, N., Wholesale and Export Boot, Shoe, and Leather Manufacturer, 13, Fore-street, Cripplegate.

MANDER, C., Electro Plater & Gilder, 14, Queen-street, Clerkenwell.

MARR, W., Electro Gilder and Plater, 6, Albemarle-street, Clerkenwell.

MARSHALL & EDRIDGE, Ship and Insurance Brokers, 34, Fenchurch-street.

MARSHALL, F., 26, Birchin-lane, Ship and Insurance Agent.

MARSHALL, M., Lighterman, 5, Mill Pond-row, Bermondsey.

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MAYES, J., Clock Manufacturer and Dealer in Clock Tools and Materials, 19, St. John's-square, Clerkenwell.

MC'CRAIGHT, R., Scale, Weight, and Weighing Machine and Gas Apparatus Manufacturer and Fitter, 94, Goswell-street.

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MITCHELL, J., Steel Pen Manufacturer, 11, Queen-st., City.

MIX, H. E., Merchant, 28, St. Mary-at-hill.

M'LAUGHLIN, A., Tea Urn Maker, 42, Gee-st., Goswell-st.

MOLINARI, A., Looking Glass and Barometer Manufacturer, &c., 4, Greville-street, Hatton-garden.

MOORE, J., & SONS, Church, Turret, and House Clock Manufacturers, 38 and 39, Clerkenwell-close.

MORRIS, T., Engineer and Machinist, 6, Clerkenwell-green.

MORGAN, T., Wholesale Export and Furnishing Ironmonger, 11, Pancras-lane, City.

NASH, J., Watch Motion Manufacturer, 19, Aylesbury-street, Clerkenwell.

NEAL, T., Steel Corn and Coffee Mill Maker, 45, St. John-street, Smithfield.

NEGRETTI, H. Manufacturer of Glass Chemical Apparatus, 11, Hatton-garden.

NEUBER, W. H., Patent Liquid Glue Manufacturer, 549, Oxford-street.

NEWTON, J. & G., Wholesale and Export Manufacturers of Enamelled Moleskin and Waterproof Coating, Grove-street, Walworth-common.

NEWTON, J., & SON, Wholesale and Export Cork Manufacturers, 50 and 51, St. John-street, Smithfield.

NORTON, J., Ornamental Tea Canister, Box, Bowl, and Vase Manufacturer, 25, Vine-street, Hatton-wall.

NORWOOD, C., Manufacturer of Artistical and Decorative Paper Hangings, &c., 9, Dean-street, New North-road; Manufactory, Rosemary Branch-bridge, Hoxton.

NOTLEY, H., Brush Manufacturer, 12, St. John's-lane, Clerkenwell.

OETZMANN & PLUMB, Patent Pianoforte Manufacturers, with Metallic Wrist Plank, and other improvements, for extreme Climates, 56, Great Russell-street, Bloomsbury, and Chenies-street, Bedford-square.

OLIVER, A., Watch Motion Manufacturer, 11, Ironmonger-street, St. Luke's.

OLIVER & EDWARDS, Watch Case Manufacturers, 19, Galway-street, St. Luke's.

PAGET, R. G., Marquee and Tent Manufacturer, 40, West Smithfield.

PAINE, S., Watch Manufacturer, 25, Dorchester-street, New North-road.

PARKER, FIELD, & SONS, Gun Makers to the Board of Ordnance, the East India, and Hudson's Bay Companies, 233, High Holborn.

PARKER, SON, & PRITCHETT, Tea Brokers, 131, Fenchurch-st.

PARKINSON & FRODSHAM, Chronometer and Watch Makers, Exchange-alley, Cornhill.

PARSONS, T., Iron and Tin Plate Merchant, 57, Great Tower-street.

PARNELL & BANNER, Ship and Insurance Brokers, 57, Gracechurch-street.

PASTORELLI & Co., Wholesale and Export Opticians, 4, Cross-street, Hatton-garden.

PETERS, T., & SONS, Coach and Harness Manufacturers, Park-street, Grosvenor-square, George-street, Portman-square, and Adam-street, West.

PHILLIPS, L., Army and Navy Clothier, Hat, Cap, and Accoutrement Maker, Sword Cutler, Outfitter, Camp and Cabin Furniture Manufacturer, 28, Strand.

PHILLIPS, O., & Co., Colonial Brokers, 91, Great Tower-street.

PHILLIPS, W., Electro-Plater and Gilder, 17, Clerkenwell-green.

PHILLIPPS & GRAVES, Lightermen, Ship Brokers, and Custom House Agents, 11, Rood-lane.

PHILLIPS, SHAW, & LOWTHER, Ship and Insurance Brokers, 2, Royal Exchange-buildings.

PHIPPS, T., Saddler and Harness Manufacturer, 243, High Holborn.

PIGGOTT, W., Army Clothier and Marquee Manufacturer, &c., 115, Fore-street.

PIPER, JNO., Wholesale Ironmonger, 47, Beech-st., Barbican.

PITMAN, W., Wine Merchant, 150, Fenchurch-street.

PIZZALA, A., Export Optician, 19, Hatton-garden.

POOLE, Dr., Private Asylum for Ladies and Gentlemen requiring the aid of a Medical Psychologist, Middlefield House, Aberdeen.

PORTER, T., Merchant, 22, East India Chambers.

POWER, D. E., Merchant, 110, Fenchurch-street.

POWELL, T., Engineer, 3, Staple-inn, Holborn.

- POWIS, JAMES & Co., Wholesale and Export Ironmongers, Lock Manufacturers, and General Factors, 26, Watling-street, City.
- PRICE, C. W., Glass Bender, by appointment, to H.R.H. Prince Albert, Glass Stainer and Embosser, Manufacturer of Shades, Convex Glasses for Clocks, Figures, Barometers, &c., Railway Signal Glasses, Watch, Coloured Sheet, Ground, Dome, and Lotus Glasses, Lamp and Gas Chimneys of all kinds, wholesale, retail, and for exportation, 19 and 20, Clerkenwell-green.
- PROBART, R. H., Brass, Gun Metal, Copper, and Bell Founder, and German Silver Caster, 49, Seward-street, Goswell-street.
- PRYOR, S. & T., Umbrella Manufacturers, 43, Holborn-hill.
- QUARM, T., Architect, 8, Grove-terrace, Loughborough-road, Brixton.
- READ, R., Instrument Maker, (by special appointments), to Her Majesty and the Hon. East India Company, Patentee of the Stomach Pump, Enema Fountain, &c., &c., 35, Regent-circus, Piccadilly.
- RICHARDSON, E., Ship and Insurance Agent, East India Chambers.
- RICHARDSON, R., Portable House, Marquee, Rick Cloth, and Wire Fence Maker, 21, Tonbridge-place, New-road.
- RING & CONQUEST, Tin, Iron, and Japan Ware Manufacturers, 22, Banner-street, St. Luke's.
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- ROBERTS, J., Importer of Colonial Produce, 31, Barbican.
- ROBERTSON, W., Wholesale Confectioner and Lozenge Manufacturer, 38, Queen's-road West, Chelsea.
- ROSSITER, J., Wholesale Trunk, Portmanteau, and Portable Cabin Furniture Manufacturer, Bullock, and Overland Trunks for India, 15, Greville-st., Hatton-garden.
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- SHAW, JOSEPH, Piano Manufacturer, 87, Hatton-garden.
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- STAYNOR, J., Shipping and Insurance Agent, 110, Fenchurch-street.
- STEVENS, J. R., Exchange Broker, 65, Old Broad-street.
- STEWART, J., & Co., Foreign Warehousemen, 11, Old Broad-st.
- STODDART, J., Wholesale Watch Manufacturer, 61, Red Lion-street, Clerkenwell.
- STODDART, R., Wholesale Watch Manufacturer, 13, Red Lion-street, Clerkenwell.
- SURGEY, W. P., Custom House, Shipping, Insurance, and Commission Agent, 2, Langbourn Chambers, Fenchurch-street.
- SWIFT, R., Wholesale and Export Leather and Shoe Warehouse, and Consignee, 98, Hatton-garden.
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- TALMADGE, J. T., & Co., Wholesale Tea Dealers, 61, King William-street, City.
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- TAYLOR, R., Marble Paper Manufacturer, 18, Helmet-row, Old-street, St. Luke's.
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- THOMPSON, FENNER, & SWINFORD, Colonial Agents, 30, Gt. Winchester-street.
- THOMPSON, W., & SON, Wholesale Brush Manufacturers, 15, Upper North-place, Gray's Inn-lane.
- THOMAS, W. F., Tailor and Habit Maker, 4, Argyle-street, Regent-street.
- TILBURY, Jun., J., Coachmaker, 35, Gloucester-place, New-rd.
- TILLEY, W. J., Engine and Pump Manufacturer, 245, Blackfriar's-road.
- TIMOTHY, D., Bed Feather Merchant, 31, Barbican.
- TIPPLER, R., Colonial Broker, 89, Great Tower-street.
- TOMS, J., Carpet Bag, &c., Manufacturer, 17, Milton-street, Cripplegate.
- TONKIN, J. W., and Co., Custom House Agents, 193, A, Piccadilly.
- TRINDER, H., Export Scented Soap Works and Brush Manufactory, 75, Watling-street.
- TROUP, JOHN, Watch Manufacturer and Wholesale Jeweller, 36, Hatton-garden.
- TURNPENNY, J., Ornamental Dye Sinker, 35, Richard-street, Islington.
- TURRELL & SON, Coach Makers, 22 and 23, Long-Acre.
- VENABLES, WILSON, & TYLER, Wholesale Stationers and Paper Manufacturers, 17, Queenhithe.
- VINER, C. E., Watch and Chronometer Maker, 235, Regent-street, and 82, Old Broad-street.
- WALKER, E., & SON, Watchmakers and Jewellers, File, Tool, & Material Manufacturers, 55, Red Lion-st. Clerkenwell.
- WALKER, J. & A., Brass Founders, Engineers, Machinists, Gas Fitters, &c., 76, Goswell-street.
- WALKER, J., Manufacturer of Improved Corrugated Iron Buildings, Roofs, &c., 63, Gracechurch-street.
- WELCH, FRASER, & Co., Colonial and Shipping Agents, Howford-buildings, Fenchurch-street.
- WHEELER, W. S., Woollen Factor, 4, Ludgate-street.
- WHITMEE & CHAPMAN, Manufacturers of Steel, Coffee, and Flour Mills, and Flour Dressing Machines, 18, Fenchurch-buildings, and 70, St. John-street, Clerkenwell.
- WHITE, JAMES, Steel Corn Mill Manufacturer, 266, High Holborn.
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- WICKER & Co., Paper Stainers, 7, Lower Copenhagen-street, Parnsbury-road, Islington.
- WILLIAMS, H., Mineral and Civil Engineer, 61, Moorgate-st.
- WILLIAMS, M., Waterproofer, 138, Fenchurch-street.
- WILSON, J., Floor Cloth Manufacturer, 253, Strand, near Temple-bar.
- WILSON, W. H., & Co., Tea Dealers and Importers, 12, Murray-street, Hoxton.
- WILSON, F., Wholesale Perfumer, 132, Leadenhall-street.
- WILCOXON, A., Wholesale and Retail Boot and Shoe Manufacturer, 60, King William-street, City.
- WINDELER, H., Carriage Clock-Case Maker, 43, Cavendish-street, New North-road, Hoxton.
- WOOD, P. H., Spirit Colouring and Refining Powder Manufacturer, 20, Redman's Row, Mile End.
- WOOLLEY THOMAS, Ship and Insurance Agent, 2, Cullem-st.
- WOOSTER, J., Manufacturer of Portable Desks, Dressing Cases, Work Boxes, Tea Caddies, &c., Wholesale and for Exportation, 9, Long-lane, West Smithfield.
- YEATMAN, J. W., Shirt Maker and Outfitter for India and the Colonies, 146, Leadenhall-street.

THE BRITISH COLONIES.

OPINIONS OF THE PUBLIC PRESS.

BELFAST NEWS-LETTER.

ANOTHER of the highly valuable and popular works, for the appearance of which the public are indebted to the industry and enterprise of the Messrs. Tallis. It is unnecessary to say that there is no better authority living on the subject of the Colonies than Mr. Montgomery Martin, whose official employments, great natural abilities, well-known research, and unwearied observation, peculiarly fit him for the execution of a work like the present. The number before us is embellished with a fine portrait of Queen Elizabeth, from Zuccherò's celebrated picture, in the possession of the Marquis of Salisbury, and with a neatly-engraved and coloured map of the world, on Mercator's Projection, distinguishing at one glance the limits of our colonial empire. The work will be admirably adapted for the use of politicians, merchants, manufacturers, and intending emigrants. It is beautifully printed, and the price is so low as to place it in the reach of even the humbler classes of self-educationists.

LITERARY GAZETTE.

THE writer's powers and intelligence are too well known to need our evidence, and we shall therefore only say that this production commences with very neat and clearly engraved maps and explanatory text, worthy of Mr. Martin. The vast importance of a perfect knowledge of our colonies has now become so essential to our imperial weal, that the value of such a work must be greatly enhanced.

MORNING ADVERTISER.

OUR colonies have largely contributed to raise England to the proud position she holds among the nations of the earth. As a source of national prosperity, their importance and value can hardly be overrated.—There is a great deal of useful and important information comprised in the introduction.—We cannot but desire success to a work, the object of which is so creditable, and the effect of which, if it be carefully and tenaciously carried out, may be so useful.

EVENING SUN.

IN the valuable compilation made by Mr. Montgomery Martin may be obtained the fullest and most authentic information in regard to the history, the extent, the condition, and the resources of the British colonies. The introductory part now under consideration is embellished with an admirable and inestimable map of the world, on Mercator's system, indicating every portion of the globe belonging to Great Britain.

DISPATCH.

THOSE engaged in commerce, or who look to emigration as the "panacea" for the evils which abound among us, will appreciate an enlarged work upon the British Colonies, now emanating from the pen of an experienced man. The facilities granted him also, by having access to the "Blue Books" and official documents relating to the Colonies and Colonial affairs, in the library of Downing-street, must render this work one of the most complete and perfect of the kind we have had.

JOHN BULL.

THE work is one which will be of no ordinary value and interest; and as far as the specimen before us goes, it encourages us to hope that it will be worthy of its spirited author.

MARK-LANE EXPRESS.

THIS is from the able pen of Mr. Martin, who enters upon the subject with statistical data and full and correct information, such as may be depended upon, coming, as it does, from one of the first statisticians of the age. The style in which the work is got up, must command a large sale. The price, too, is a mere bagatelle.

CRITIC.

THIS bids fair to be a most useful and comprehensive work, affording a vast fund of information on a subject of which we are at present rather destitute, on the best authorities. Maps of our colonial possessions are to be published in the parts. This contains "The World, on Mercator's Projection," showing the steam-routes to the colonies.

LONDON MERCANTILE JOURNAL.

WITH unfeigned satisfaction do we congratulate this country on Mr. Montgomery Martin having applied himself to the great task sketched out on the title-page of the work we are about to review. Had he declined it, we should hope in vain to see it undertaken by any other living man possessing the same rare qualifications for executing it successfully. His long and persevering researches into the subject, the passion (so to say) with which he has devoted himself to its study, his facility in the arrangement of facts, and that lucidity of style which arises from an author being perfectly master of the matter he has in hand, have long established his pretensions to become, if he would, emphatically *the* historian of our Colonial Empire; and we rejoice that not even honours and preferment have induced him to overlook or under value his proper destiny.

LLOYD'S NEWSPAPER.

WE are equally well pleased with the contents and the style in which it is got up. It will be one of the most valuable works of the day, as well as one of the most interesting. The style is good, and the writer and publishers are known—the first as a man of talent, the latter as men who keep their promise to the public.

BRISTOL TIMES.

THIS beautiful work, as our readers will perceive, is by the same enterprising parties who are doing such good service in furnishing the table of the school-room, and the library of the private house with the Illustrated Atlas. Like the latter, it is beautifully illustrated, and contains useful information in its letter-press.

TREWMAN'S EXETER FLYING POST.

A WORK which bids fair to be valuable as a reference, whilst it abounds with useful information. The Colonies of this Empire are important alike from their vastness, their population, and the trade carried on with them by the mother country. There can be no doubt of this publication becoming a standard work.

WEST OF ENGLAND CONSERVATIVE.

IT is obvious that a work which will give us such information, with respect to the Colonies, as is shadowed forth in the title, will be a work of great value and utility, and be likely to command very general attention. If there be one living writer better qualified than his contemporaries, by experience, by ability, by opportunity, by all his previous pursuits and studies, to undertake such a work, and to execute it well, that one is Mr. Montgomery Martin; and we may, upon the strength of his past achievements, look forward with confidence to his complete success.

PAISLEY AND RENFREWSHIRE REFORMER.

THIS is a new and important work, which has been added to their other spirited publications by the Messrs. Tallis, of London and New York. The merits of the writer, Mr. Montgomery Martin, are well known in the literary world; and from the labour and statistical researches that have evidently been gone into, in the production of the work, it will fill up a vacancy that was much felt in the general literature of the country, on account of the absence, hitherto, of any connected book on the history, resources, and condition of the British Colonies.

PROSPECTUS.

THE vast importance of the Colonial and Transmarine Possessions of the Crown is gradually becoming better understood by the People of England, who are learning to appreciate more justly the influence they have already exercised in elevating this country to its present political and commercial position among European nations, and the ample means they afford of providing room for a superabundant population; consequently of *creating new markets for our commerce, remunerative employment for labour, and safe and profitable investments for unemployed capital.*

The British Colonial Empire is without a parallel in history. It contains a cultivable area of two million square miles, and includes in its Possessions—rich islands, fertile plains, strong fortresses, and secure havens, in each quarter of the globe.

From her colonies England receives the varied products of every clime, and exports in return produce and manufactures to the value of twenty million sterling. Thus, strengthened by reciprocity of interests, a commerce is sustained which tends materially to consolidate the empire, and render it independent of the whole world.

As a source of national prosperity the value of our colonies can hardly be overrated, since through them the incubus which now weighs down the energies of the nation may be converted into a blessing. A population of thirty million on an area of seventy-six million statute acres in the United Kingdom, of which thirty million acres are waste lands, shews a density of four hundred inhabitants to each square mile of arable surface. This alarming density is increasing at the rate of *more than one thousand births a day—nearly a mouth every minute*—an augmentation not only beyond our capabilities of producing food at home, but far outstripping our means of creating property for its support. Two hundred million sterling have been levied by law, and expended for the relief of the poor in England and Wales alone between the years 1815 and 1849. In the United Kingdom the sum now annually levied as poor-rate is nearly eight million sterling; the number of paupers relieved yearly is about four million, and there are at least two million able-bodied poor ready to work for their bread, but unable to find employment. The sum which it costs to maintain a pauper for a year in a poor-house in England would convey him to another part of the empire, where he might in the same space of time *become a producer of food and a consumer of our manufactures.*

Our Colonies offer a noble field for British industry. They could sustain with ease an addition of one hundred million to their present population. In the Canadas there are not six individuals to each square mile of area, in Australasia not three, in southern Africa not two. Emigration has become a matter of urgent national as well as individual necessity, and it is of vital importance that the life-blood annually poured forth should be directed to the maritime possessions of England, that it may contribute to invigorate our own power, *instead of strengthening that of a foreign state.*

It is of deep importance that the mind of the nation should be imbued with a right understanding of this momentous subject, since a wise use of the immense resources which a merciful Providence has placed at our disposal may avert the evils of increasing pauperism, bankruptcy, and social disorganization.

It has, consequently, been deemed that full and correct information concerning the Extent, Condition, and Resources of our Colonies would be acceptable to all classes of the community,—might tend to create a national feeling for our distant fellow-citizens,—and to strengthen the natural ties arising from Kindred, Common Origin, Government, and Language. EVERY RATE-PAYER IN THE KINGDOM is directly interested in the cultivation of the waste lands in the Colonies, as they offer prompt and permanent relief from the growing pressure of pauperism on property—a pressure rapidly increasing, which threatens to exterminate the middle rank of society, and leave only two classes—the extremes of rich and of poor. *To those who are now seeking a home beyond the seas, but still among their own countrymen, and beneath the sceptre of our gracious Sovereign, the extent and variety of our Colonies present choice of climate, soil, peculiarity of produce, or other circumstances adapted to their respective exigencies.*

MERCHANTS, MANUFACTURERS, AND SHIPOWNERS, who view with alarm the recent changes in our commercial policy, may find in the capabilities of our Colonies relief from the suffering inevitably arising from all states of transition, whether for good or for evil. The Politician, desirous of strengthening the basis on which, under Providence, this maritime empire is founded, cannot study too carefully the state and prospects of our Colonial Dominions; and the Philanthropist, who feels that human improvement can alone be promoted and secured by the inculcation and practice of Christian principles, will gladly increase his knowledge of the condition and wants of one hundred million of his fellow-subjects of every creed, colour, and clime.

Copy of a Letter from the Secretary of State for the Colonies, authorizing the examination of the Statistical, Commercial, and other Documents transmitted yearly by the Governor of each Colony for the use of Her Majesty's Government:—

Downing Street, 20th June, 1849.

Sir,—I am directed by Earl Grey to acquaint you, in answer to your Letter of the 11th instant, that upon application to the Librarian of this Office you will be permitted to have access to the "Blue Books" and other documents which you desire to consult for the compilation of your intended Work.

Re. M. Martin, Esq.

I am, Sir, your most obedient Servant,

B. HAWES.

ADVERTISEMENTS.

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THE DAYS OF DEPARTURE ARE THE 1ST AND 15TH OF EACH MONTH FROM LONDON, AND THE 11TH AND 25TH FROM PLYMOUTH.

LOAD AT THE JETTY, LONDON DOCK.

Passengers from Ireland can readily join this Line of Ships at Plymouth, at a small cost, by the Belfast, Dublin, and Cork Steam Traders, and have every assistance rendered them on their arrival at Plymouth by MARSHALL and EDRIDGE's Agent there.

These Ships having spacious and well-arranged Poops offer unusually good opportunities for First-Class Cabin Passengers, who will be supplied with provisions (including live stock) of the best quality, and in ample quantity; the passage-money being most moderate, and regulated according to the accommodation required.

For terms of Freight or Passage-money, particulars of the Ships now loading, Dietary Scales, and further information, apply to the undersigned, who are constantly dispatching a succession of superior First-Class Ships (Regular Traders) to each of the Australian Colonies, Van Diemen's Land, &c., and who also take charge of Goods consigned to their care for shipment, forwarding the same by the earliest eligible conveyance.

MARSHALL & EDRIDGE,
34, Fenchurch-street, London.

REGULAR PACKETS FOR AUSTRALIA.

Emigration to Port Adelaide, Port Phillip, and Sydney.

(ON THE NEW PRINCIPLE ESTABLISHED BY THE UNDERSIGNED IN OCTOBER, 1848.)

SAILING FROM THE EAST INDIA DOCKS.

(The Trains for which leave Fenchurch Street Station every fifteen minutes.)

THE splendid fast-sailing Ships of this line, stand first-class at Lloyds, have full poops, with spacious accommodation, the 'tween decks are lofty and airy, being upwards of seven feet in height, and are fitted up expressly for Passengers. The Cabins are enclosed, and each family or married couple has a separate cabin.

The "CANDAHAR," A 1 642 tons register, will sail from the East India Docks on the 25th MARCH, and from Plymouth, 8th APRIL, and will be followed by a monthly succession of equally fine ships.

These ships carry neither Chief Cabin nor Steerage Passengers, but Passengers of respectability all on equality, who are allowed the full range of the ship, at the uniform rate of TWENTY GUINEAS each Adult, including Provisions of the best kind, Medical Attendance, Bed and Bedding, and mess utensils necessary for their use on board, and sail punctually on the appointed dates (wind and weather permitting) embarking Passengers both in London and Plymouth. Passengers residing in the country, are particularly requested to write to either of the undersigned Agents before leaving home, to know on what day they will be required to be on board. Parties making engagement by letter, enclosing a Banker's or Post Office Order, will save expense, and have their berths secured until they embark in London or at Plymouth.

Each ship is under the inspection of Her Majesty's Emigration Officers, and carries an experienced Surgeon.

Provisions will be cooked for the Passengers.

Passengers from Ireland can readily join this line of ships at Plymouth at a small cost, by the Belfast, Dublin, and Cork Steam Traders, and have every assistance rendered them on their arrival at Plymouth, by one of the undersigned.

From Passengers by those ships which have arrived out, testimonials have been received of the good faith kept, and the excellent provisions provided, and in order to show their satisfaction, have presented the commanders of two of them with pieces of plate, and the others with flattering testimonials on the termination of the voyages; the originals can be seen at our offices. For further particulars, apply to

HALL BROTHERS, 2, RICHES COURT, LIME STREET.
T. B. MALLETT, 4, CASTLE COURT, BIRCHIN LANE.
HOTCHKIN & MOBBS, 3, EAST INDIA CHAMBERS,
LEADENHALL STREET.

REGULAR PACKETS TO AUSTRALIA.

Emigration to Australia on an Economical Principle.

FOR ADELAIDE AND PORT PHILLIP, SAILING THE LAST DAY OF EACH MONTH.
FROM THE ST. KATHARINE DOCKS, AND CALLING AT PLYMOUTH.

THE undersigned despatch fine Ships A 1 at Lloyd's, of large tonnage, with full poops for the accommodation of Cabin Passengers, and lofty and well-ventilated 'tween decks, which are fitted-up with enclosed Cabins throughout, for families and married couples, who have separate Cabins, and single persons. The passage money in the 'tween decks is TWENTY GUINEAS each Adult, and in proportion for Children, including the best of Provisions, Bed and Bedding, Medical Attendance, and mess utensils. The Ships sail punctually on the appointed days (wind and weather permitting). These Ships load in the St. Katharine Docks, and carry experienced Surgeons.

The "TORY," 800 tons burthen, Captain Row, will leave the St. Katharine Docks for ADELAIDE, PORT PHILLIP and SYDNEY the 31st MARCH, and Plymouth, the 10th April.

The "WILLIAM STEPHENSON," 800 tons register, Captain WILLIAMS, will leave the St. Katharine Docks for ADELAIDE and PORT PHILLIP, the 10th May, and Plymouth the 20th May.

Children from 1 to 7 years of age are victualled and charged as one-third of an Adult; from 7 to 14 years, as a half. Twenty feet is allowed each Adult Passenger for luggage, and any excess is subject to freight.

Passengers from Ireland can readily join this line of ships at a small cost, by the Belfast, Dublin, and Cork steam traders, and have every assistance rendered them at Plymouth by one of the undersigned.

A deposit of one-half the amount of passage-money to be paid at the time the berths are engaged, the balance to be paid prior to the granting of the Embarkation Order. The berths are appropriated in rotation as the deposits are paid, and every attention is paid to the health, harmony, and well-being of all on board. Passengers in the country can have their berths secured, by sending a Bank or Post Office Order to either of the undersigned, for half the amount of passage-money, and the order of choice properly allotted them.

Apply for Dietary Scales and further information, to—

THOMAS WOOLLEY, 2, CULLUM STREET, FENCHURCH STREET; or to
J. W. GULL, 4, BRABANT COURT, PHILPOT LANE.

REGULAR PACKETS FOR AUSTRALIA.

The following SPLENDID SHIPS have been despatched for ADELAIDE and PORT PHILLIP by the undersigned, namely—ANNA MARIA, 800 tons; HARPLEY, 900 tons; STRATHEDEN, 850 tons; RAJAH, 650 tons; JENNY LIND, 900 tons; BOYNE, 1,000 tons; and will be followed by the

STEBONHEATH, 1,550 tons; JOHN SARGEANT, commander, to sail 15th MAY.

DELTA, 1,250 tons; G. CRANS, commander, to sail 15th JUNE. Both for the same ports.

These splendid vessels are A 1 at Lloyd's, have superb accommodation for cabin passengers, and having nearly eight feet height in the 'tween decks, offer most desirable opportunity for second class passengers, in enclosed cabins, at £15 per adult. Each ship carries an experienced Surgeon, and calls at PLYMOUTH to embark passengers, and will be followed by equally fine ships, sailing on the 15th of every month.

FORD & REEVES, 3, LEADENHALL STREET.

To Sail from Gravesend, April the 20th, and from Plymouth, April the 30th.

FOR ADELAIDE, PORT PHILLIP, AND SYDNEY,

The fine Fast-sailing Frigate-built Ship "BERNICIA," A 1 for 12 Years. 800 tons burthen. HARFORD ARNOLD, Commander. Lying in the West India Dock. This splendid vessel has a most spacious poop and very superior accommodation for Cabin Passengers. She has 7 feet height between decks, and is fitted expressly for Passengers, at the uniform rate of £21 per Adult, including a most liberal Table, excellent bedding, and mess utensils, with enclosed cabins for single persons and families. She carries an experienced Surgeon. Persons applying early will have the choice of cabins.

For freight or passage apply to SIR JOHN PIRIE, BART., & Co., 19, BIRCHIN LANE, CORNHILL.

NEW ZEALAND COMPANY'S SHIP.

A FIRST CLASS PASSENGER SHIP will be despatched from the port of LONDON for the Company's Settlements in New Zealand, on the First Monday in every alternate Month, until further Notice, and will carry an experienced Surgeon.

The "MARINER," 683 Tons, will leave the London Docks on MONDAY the 1st of APRIL next.

Rates of Passage, Provisions included:—

For each Person:—	Chief Cabin.	Fore Cabin.	Steerage Cabin.
14 Years old, and upwards . . .	45 guineas . . .	25 guineas . . .	18 guineas.
7 Years old, and under 14 . . .	27 " . . .	15 " . . .	10 "
1 Year old and under 7 . . .	18 " . . .	10 " . . .	8 "
Under 1 Year old . . .	0 " . . .	0 " . . .	0 "

An experienced Surgeon is appointed by the Company, and Medicines, Medical Comforts, and an ample Dietary provided for each class of Passengers.

Purchasers of Land are allowed a portion of the purchase money towards the cost of Passage of themselves and their families, according to the Rules and Regulations laid down in the Company's Terms of Purchase.

For Freight, Passage, or further information, apply at the NEW ZEALAND HOUSE, or to Mr. JOSEPH STAYNER, Broker, 110, Fenchurch Street, London.

NEW ZEALAND HOUSE, 9, BROAD STREET BUILDINGS, LONDON,

By order of the Court,
THOMAS CUDBERT HARINGTON.

22nd February, 1850.

NEW ZEALAND COMPANY—CONVEYANCES OF LAND.

CROWN GRANTS having been issued to the New Zealand Company, of the Lands comprised in the Settlements of WELLINGTON, NELSON, and OTAGO, the Company is now prepared to execute CONVEYANCES under its Corporate Seal to owners of Land in those Settlements, in accordance with the terms of the Original Land-Orders, and with the provisions of the Company's Powers Act of the 9th and 10th Victoria, c. 382.

Forms of Application may be obtained at the NEW ZEALAND HOUSE.

Due Notice will be given of the arrival of the Crown Grant for the Settlement of NEW PLYMOUTH, which is expected by an early ship.

NEW ZEALAND HOUSE, 9, BROAD STREET BUILDINGS, LONDON,

By order of the Court,

THOMAS CUDBERT HARINGTON.

1st October, 1849.

NATAL PACKETS.

EMIGRATION UNDER THE SANCTION OF HER MAJESTY'S GOVERNMENT.

THE NATAL COMPANY will dispatch, on the 4th of May, the fine, new, fast-sailing Ship, "BALLENGEICH," A 1, 478 Tons, WILLIAM LIDDELL, Commander, lying in the St. Katherine Docks. This Ship has superior accommodations for Passengers, is officered and manned by thoroughly competent and careful persons, will carry an experienced Surgeon, be well supplied with medical stores, life-boats, life-buoys, &c., and will sail punctually to her appointed time. Fares—Steerage, £10; and Intermediate, £19; each including abundance of the best provisions, and if approved by her Majesty's Commissioners, a free grant of twenty acres of the Company's superior Land, with the right of selecting it. Chief Cabin, £35. Children under fourteen years, half the above amounts. Children under one year, free.

To be followed by another equally eligible Vessel in June. Apply to—

MURDOCH & CO., 80, KING WILLIAM STREET.
FRY & DAVISON, 113, FENCHURCH STREET.

NATAL COMPANY.

ESTABLISHED A.D. 1849.

FOR PROMOTING THE COLONIZATION, AGRICULTURE, & COMMERCE OF NATAL.

80, KING WILLIAM STREET, LONDON; PIETER MARITZBURG AND
D'URBAN, NATAL.

Managing Director.—GEORGE P. MURDOCH, Esq.

Shipping Agents.—MESSRS. FRY AND DAVIDSON, No. 113, FENCHURCH STREET, LONDON.

Colonial Agent.—EDMUND MOREWOOD, Esq. | *Surveyor.*—R. S. UPTON, Esq.

HER Majesty's Government having been pleased to sanction the adoption of measures for carrying out the objects of the Company, and arrangements having been made for that purpose, the Company invites intending emigrants to avail themselves of the advantages proposed by this most favoured colony. To enable parties to settle in Natal, the Company have obtained a large tract of land, of the best description, which they purpose dividing into suitable farms for passengers by their line of superior fast-sailing first-class British built vessels, in which every precaution and attention will be adopted to ensure safety, comfort, and morality. The fares by these packets, to include provisions of the best quality, and on a most liberal scale, have been calculated and adjusted in the most economical manner. In addition thereto the Company have provided commodious buildings for their gratuitous temporary occupation.

The Company grant letters of credit on their agent, payable on demand, or bills at thirty days' sight.

For further particulars apply at the Company's Office.

GEORGE P. MURDOCH, *Managing Director.*

80, KING WILLIAM STREET, 18th April, 1850.

THE CANTERBURY ASSOCIATION

FOR

FOUNDING A SETTLEMENT IN NEW ZEALAND.

Incorporated by Royal Charter, dated 13th November, 1849.

PRESIDENT,

His Grace the ARCHBISHOP OF CANTERBURY.

COMMITTEE OF MANAGEMENT.

JAMES HUTT, Esq., *Chairman.*

THE BISHOP OF NORWICH.

LORD LYTTTELTON.

LORD BROOKE, M.P.

LORD COURTENAY.

SIR WALTER FARQUHAR, BART.

C. B. ADDERLEY, Esq., M.P.

HON. FRANCIS BARING, M.P.

HON. R. CAVENDISH.

HON. F. CHARTERIS, M.P.

T. SOMERS COCKS, Esq., M.P.

REV. E. COLERIDGE.

W. FORSYTH, Esq.

REV. G. R. GLEIG.

EDMUND HALSWELL, Esq.

REV. E. HAWKINS.

JOHN HUTT, Esq.

SAMUEL LUCAS, Esq.

F. A. M'GEACHY, Esq.

G. K. RICKARDS, Esq.

J. SIMEON, Esq., M.P.

CHARLES G. WYNNE, Esq.

REV. CECIL WYNTER.

J. R. GODLEY, Esq., *Resident Chief Agent in New Zealand.*

Information respecting the plans and progress of the Association may be obtained on application to the Secretary, at the Office of the Association, No. 41, Charing Cross.

Gentlemen intending to emigrate, and who propose forming the first body of colonists, meet daily, from 11 till 5, at the Colonists' Rooms, No. 1A, Adelphi Terrace, Strand, and are ready to give every information, either personally or by letter, to parties desirous of proceeding to the Settlement.

4th March, 1850.

By order,

H. F. ALSTON, *Secretary.*

CANTERBURY SETTLEMENT, NEW ZEALAND.

NOTICE is hereby given, that persons desirous of purchasing Land with the advantages offered to the first body of Colonists, must send in their applications to the Secretary, on or before the 30th June next.

Printed Forms of Application may be had, on reference to the Secretary, at the Office of the Association, 41, Charing Cross.

By order,

H. F. ALSTON, *Secretary.*

19th March, 1850.

BANK OF AUSTRALASIA,

(Incorporated by Royal Charter, 1835).

LONDON OFFICE, No. 8, AUSTIN FRIARS.

Paid-up Capital £900,000,

Directors.

EDWARD BARNARD, ESQ.
JOHN STUDHOLME BROWNRIGG, ESQ.
SIR GEORGE CARROLL, *Alderman*.
OLIVER FARRER, ESQ.

GEORGE HOLGATE FOSTER, ESQ.
SIR ANDREW PELLET GREEN, R.N.
JAMES HELME, ESQ.
SAMUEL EUSTACE MAGAN, ESQ.

GEORGE MEEK, ESQ.
CHARLES MORRIS, ESQ.
WILLIAM SARGENT, ESQ.
ALEXANDER WILSON, ESQ.

SECRETARY—WILLIAM MILLIKEN, Esq.

BANKERS—THE BANK OF ENGLAND, & MESSRS. SMITH, PAYNE & SMITHS.

SOLICITORS—MESSRS. FARRER & Co.

The Court of Directors grant Bills on the Colonies at Thirty Days' Sight; and Letters of Credit, payable on demand Applications to be made at the Office of the Corporation, No. 8, Austin Friars; or at Messrs. SMITH, PAYNE & SMITHS, Bankers, No. 1, Lombard-street, where terms can be ascertained. The Bank also sends out Bills on the Colonies for collection.

The Branch Establishments of the Bank are as follow, viz.—

In New South Wales { SYDNEY.
MAITLAND—Hunter's River.
In Port Phillip . . { MELBOURNE.
GEELONG.

In Van Diemen's Land . . { HOBART TOWN.
LAUNCESTON.
In South Australia ADELAIDE.

(By Order of the Court),

WILLIAM MILLIKEN, *Secretary*.

UNION BANK OF AUSTRALIA.

LONDON OFFICE, 38, OLD BROAD STREET.

Paid up CAPITAL £820,000, in Shares of Twenty-five Pounds each.

DIRECTORS.

ROBERT BROOKS, ESQ.
HENRY BUCKLE, ESQ.
ROBERT CARTER, ESQ.
JAMES JOHN CUMMINS, ESQ.

JOSEPH DOWSON, ESQ.
ROBERT GARDNER, ESQ., Manchester.
BENJAMIN E. LINDO, ESQ.
CHARLES EDWARD MANGLES, ESQ.

JAMES BOGLE SMITH, ESQ.
JAMES RUDDELL TODD, ESQ.
WILLIAM WILSON, ESQ.
THOMAS YOUNG, ESQ.

BANKERS—MESSRS. GLYN, HALLIFAX, MILLS, & Co.

SOLICITORS—MESSRS. BEDDOME & WEIR.

AGENTS.

THE BANK OF IRELAND.
THE NATIONAL PROVINCIAL BANK OF ENGLAND.
THE NATIONAL BANK OF SCOTLAND.
LIVERPOOL—THE BANK OF LIVERPOOL.

BRISTOL—MESSRS. CHARLES HILL & Co.
PORTSMOUTH—MESSRS. GRANTS & GILLMAN, Bankers.
PLYMOUTH—THE DEVON & CORNWALL BANKING COMPY.

COLONIAL ESTABLISHMENTS.

SYDNEY }
BATHURST } NEW SOUTH WALES.
MELBOURNE }
GEELONG }
PORTLAND } PORT PHILLIP.

ADELAIDE }
HOBART TOWN } SOUTH AUSTRALIA.
LAUNCESTON }
WELLINGTON } VAN DIEMEN'S LAND.
AUCKLAND } NEW ZEALAND.

COLONIAL INSPECTOR—JOHN CUNNINGHAM M'LAREN, ESQ.

The Directors of this Bank grant Letters of Credit, or Bills at Thirty Days' sight, upon their above-mentioned Branches, at the customary rates, on the money being deposited. They also negotiate approved Bills on the Colonies at 30, 60, or 90 days' sight, the terms for which may be obtained on application at their office.

(Signed)

SAMUEL JACKSON, *Secretary*.

SOUTH AUSTRALIAN BANKING COMPANY.

(INCORPORATED BY ROYAL CHARTER)

No. 54, OLD BROAD STREET, LONDON.

CAPITAL £200,000, IN SHARES OF £25 EACH, WITH POWER TO INCREASE IT TO £500,000.

DIRECTORS.

J. BROWN, ESQ.
W. CHIPPINDALE, ESQ.
JOHN FUSSELL, ESQ.

EDWARD DIVETT, ESQ., M.P., *Chairman*.
J. H. LECKIE, ESQ.
J. R. MILLS, ESQ.
SIR JOHN PIRIE, BART., *Alderman*.

J. WHEELTON, ESQ.
J. B. WHITE, ESQ.

AUDITORS.

C. CHIPPINDALE, ESQ.

F. LADBROKE, ESQ.

BANKERS.—MESSRS. CURRIE AND Co.

SOLICITORS.—MESSRS. MARTEN, THOMAS, AND HOLLAMS.

MANAGER.—EDMUND JOHN WHEELER, ESQ.

MANAGER IN COLONY.—EDWARD STEPHENS, ESQ.

LOCAL DIRECTORS AT ADELAIDE.—GEORGE MORPHETT, ESQ.; E. J. S. TRIMMER, ESQ.; R. F. NEWLAND, ESQ.
The Directors of this Company receive Deposits of Money in London, and grant Letters of Credit for sums under £300, or Drafts at thirty days' sight for larger amounts, on their Bank at Adelaide. The terms are regulated by the state of exchange with the Colony.

The Company also negotiate approved Drafts on South Australia.

Bills collected in the Colony upon a commission of 2½ per cent., and the proceeds remitted to England.

For terms of exchange, and further particulars, apply at the Company's Offices, as above.

EDMUND J. WHEELER, *Manager*.

SOUTH AUSTRALIAN COMPANY.

No. 4, NEW BROAD STREET, LONDON.

Capital £350,000, in Shares of £25 each, with power to increase it to £600,000.

DIRECTORS.

JAMES RUDELL TODD, Esq., *Chairman.*

BERTRAM W. CURRIE, Esq.
EDWARD DIVETT, Esq., M.P.
SIR CULLING E. EARDLEY, BART.

RICHARD FOSTER, Esq.
JOHN FUSSELL, Esq.
THOMAS FUSSELL, Esq.

CHARLES ROBERTS, Esq.
JOHN WHEELTON, Esq.

TRUSTEES.—J. R. TODD, Esq.; E. DIVETT, Esq., M.P.;
J. FUSSELL, Esq.

AUDITORS.—J. B. WHITE, Esq.; W. RICHARDS, Esq.
BANKERS.—MESSRS. CURRIE AND CO.

SOLICITORS.—MESSRS. BEDDOME AND WEIR.

MANAGER.—DAVID MCLAREN, Esq.

MANAGER IN SOUTH AUSTRALIA.—WILLIAM
GILES, Esq.

This Company has been formed chiefly for the purchase and improvement of lands in South Australia, the growth of Wool, the rearing of Stock, and similar objects.

The Company being proprietors of extensive and fertile districts in South Australia, will treat with Farmers for settling thereon on very liberal terms. The great capabilities of that country, both for agricultural and pastoral pursuits, are now universally admitted. The Company has leased upwards of twenty-five thousand acres to respectable tenants. Town-lands also may be obtained, on very favourable terms, on building leases.

The mineral discoveries in South Australia have been singularly rich and extensive—are attracting universal notice—and have contributed to secure for it an unquestionable pre-eminence among the Australian Colonies. The population is very rapidly increasing.

The Company are large proprietors of mineral lands, and are prepared to grant setts of these lands for twenty-one years, on liberal terms.

Information as to the terms offered to Farmers, Builders, and Miners, and statistical details of the Colony, may be received GRATIS, on application, personally or by letter, at the Company's Offices.

DAVID MCLAREN, *Manager.*

UNITED KINGDOM LIFE ASSURANCE COMPANY,

8, WATERLOO PLACE, PALL MALL, LONDON.

HONORARY PRESIDENTS.

EARL OF COURTOWN.
EARL LEVEN AND MELVILLE.
EARL OF NORBURY.

EARL OF STAIR.
EARL SOMERS.
LORD VISCOUNT FALKLAND.

LORD ELPHINSTONE.
LORD BELHAVEN AND STENTON.
WILLIAM CAMPBELL, Esq. OF TILlicHEWAN

LONDON BOARD.

CHARLES GRAHAM, Esq., *Chairman.*

CHAS. DOWNES, Esq., *Dep.-Chairman.*
H. BLAIR AVARNE, Esq.
E. L. BOYD, Esq., *Resident.*

D. Q. HENRIQUES, Esq.
J. G. HENRIQUES, Esq.
F. CHARLES MAITLAND, Esq.

WILLIAM RAILTON, Esq.
F. H. THOMSON, Esq.
THOMAS THORBY, Esq.

TRUSTEES.—CHARLES GRAHAM, Esq.; CHARLES DOWNES, Esq.; EDWARD LENNOX BOYD, Esq.; FREDERICK
CHARLES MAITLAND, Esq.

This Company, established by Act of Parliament in 1834, affords the most perfect security in a large paid-up capital, and in the great success which has attended it since its commencement, *its annual income being upwards of 99,000.*

SECOND SEPTENNIAL DIVISION OF PROFITS AMONG THE ASSURED.—In 1841 the Company declared a Bonus of £2 per cent. per annum on the sum insured, to all Policies of the Participating Class, from the time they were effected to the 31st December, 1847, 2½ per cent. per annum was added at the General Meeting on 6th July, 1848.

The Bonus added to Policies from March, 1834, to the 31st December, 1848, is as follows:—

Sum Assured.	Time Assured.	Sum added to Policy in 1841.	Sum added to Policy in 1848.	Sum payable at Death.
£5,000	13 Years 10 Months	£683 6 8	£787 10 0	£6,470 16 8
5,000	12 Years	500 0 0	787 10 0	6,287 10 0
5,000	10 Years	300 0 0	787 10 0	6,087 10 0
5,000	8 Years	100 0 0	787 10 0	5,887 10 0
5,000	6 Years	—	675 0 0	5,675 0 0
5,000	4 Years	—	450 0 0	5,450 0 0
5,000	2 Years	—	225 0 0	5,225 0 0

The Premiums, nevertheless, are on the most moderate scale, and only one-half need be paid for the first Five Years, when the Insurance is for Life.

Every information will be afforded on application to the Resident Director, at the Office, 8, Waterloo Place, London.

EMIGRATION.

BENJAMIN EDGINGTON, 2, DUKE STREET, SOUTHWARK, LONDON BRIDGE,

Invites settlers to inspect his

EMIGRATION TENTS,

Which are fitted up with every requisite, at a moderate cost. May be seen any day at his Manufactory, 2, Duke-street, Southwark, one being purposely erected, with cot, table, and camp-stool complete.—A Warehouse, 208, Piccadilly.



18, WHARF ROAD, CITY ROAD, LONDON.

TO EMIGRANTS, CAPTAINS, SHIPPERS, &c.

No one should leave England without providing himself with a stock of Gutta Percha Soles and Solution. The ease with which these soles can be applied in countries where no shoemaker can be found—their power of keeping the feet perfectly dry, thus preserving the body from coughs, colds, &c., in lands where medical advice cannot be had—and their great durability and cheapness, render them invaluable to all who propose sailing to distant countries. Gutta Percha Wash Basins, Chamber Bowls, Bottles, Flasks, &c., are admirably suited for shipboard and emigrants, as they *can so readily be converted into life-buoys in the event of a shipwreck*. Any person taking a stock across the seas will find it afford profitable speculation.—Manufactured by THE GUTTA PERCHA COMPANY, PATENTEES, WHARF-ROAD, CITY-ROAD, LONDON; and sold by their wholesale dealers in town and country.

"Gutta Percha Tubing, which, being so very light, may be easily exported, will form a valuable means for supplying new settlements with water. The ingenious emigrant can readily convert the Gutta Percha life-buoys, &c., into shoe soles when he arrives across the sea. The Gutta Percha balsam, which stops the flow of blood from a cut, &c., seems useful for emigrants. Various as the applications of Gutta Percha may be, none, perhaps, will exceed in value the soles for boots and shoes. The ease with which they can be applied, and the security from damp and cold feet which they afford, entitle them to be placed (together with a few tins of solution) in the list of *necessary articles* for every emigrant's chest."—STANDARD OF FREEDOM.

C. R. THOMPSON & CO., EAST INDIA, OVERLAND, AND GENERAL AGENTS, 30, GREAT WINCHESTER STREET.

THE BANKING DEPARTMENT of this agency embraces all the routine of monetary transactions. PAY, PENSIONS, ANNUITIES, ALLOWANCES of every description, and Dividends, are received and remitted, or invested. Sales and purchases of stocks, British or Foreign, are effected upon the most advantageous terms.

All parties about to proceed to India can obtain at this Agency the best possible information of the SHIPS and COMMANDERS, the character of their accommodation, and the rate of passage-money. PASSAGES are negotiated upon the most advantageous terms for the parties without any charge for agency, and plans of the ships are always ready for inspection. BAGGAGE of every description shipped and insured.

Every information relating to the OVERLAND JOURNEY will be afforded, and the necessary LETTERS and LETTERS OF CREDIT furnished to TRAVELLERS.

WRITERS, CADETS, and ASSISTANT-SURGEONS will find at this establishment every necessary information for their present and future guidance, and their outfits and passage will be superintended and arranged effectually and economically.

WINES, and all requisite REGIMENTAL SUPPLIES, furnished with punctuality and despatch.

W. P. SURGEY, CUSTOM HOUSE, SHIPPING, AND INSURANCE AGENT, 2, LANGBOURN CHAMBERS, FENCHURCH STREET, LONDON,

Forwards Goods and Packages to ALL PARTS OF THE WORLD, by Ship or Steamer, and to India overland, for private persons as well as for merchants. He also clears through the Custom House and forwards to their destination Foreign merchandize and works of art.

TO PARTIES EMIGRATING, he offers his services in selecting vessels, arranging passage, and adjusting all matters connected therewith, in which he has had much experience, thus saving them from infinite trouble and perplexity.

The Baggage, &c., of Passengers from abroad, cleared immediately upon arrival.

PIANOFORTES.—TO MERCHANTS, &c. J. COOPER & COMPANY, MAKERS OF THE PATENT VICTORIA HARMONIC, OR IMPROVED PICCOLO, AND OTHER PIANOFORTES,

Have always on sale a large stock of their Instruments, which are peculiarly adapted for exportation; also a variety of superior Second-hand.

MOORGATE STREET, BANK, LONDON.—ESTABLISHED 1808.

BY HER MAJESTY'S LETTERS PATENT. WATERPROOF GARMENTS.

EDWARD SPENCER & CO.

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Ditto, cabriole legs	1 1 0	Mahogany Loo Tables	2 5 0	Arabian Bedstead (twisted pillars)	4 4 0
Rosewood Loo Tables	3 10 0	Library ditto, with leather tops .	3 10 0	Portable Ottoman Bedstead . . .	2 2 0
„ Cheffonier, with plate glass back	5 10 0	Mahog. Dining Tables, sliding frames	4 10 0	Rich Gilt Cornice, per foot, 2s. 6d. to 3s. 6d.	

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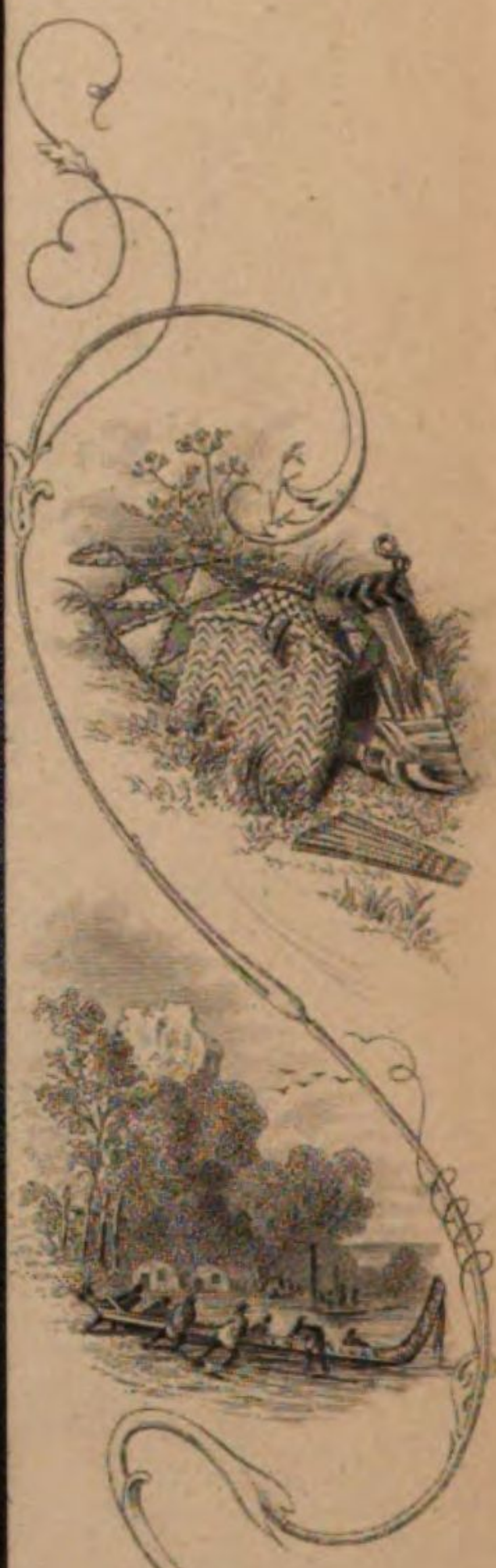
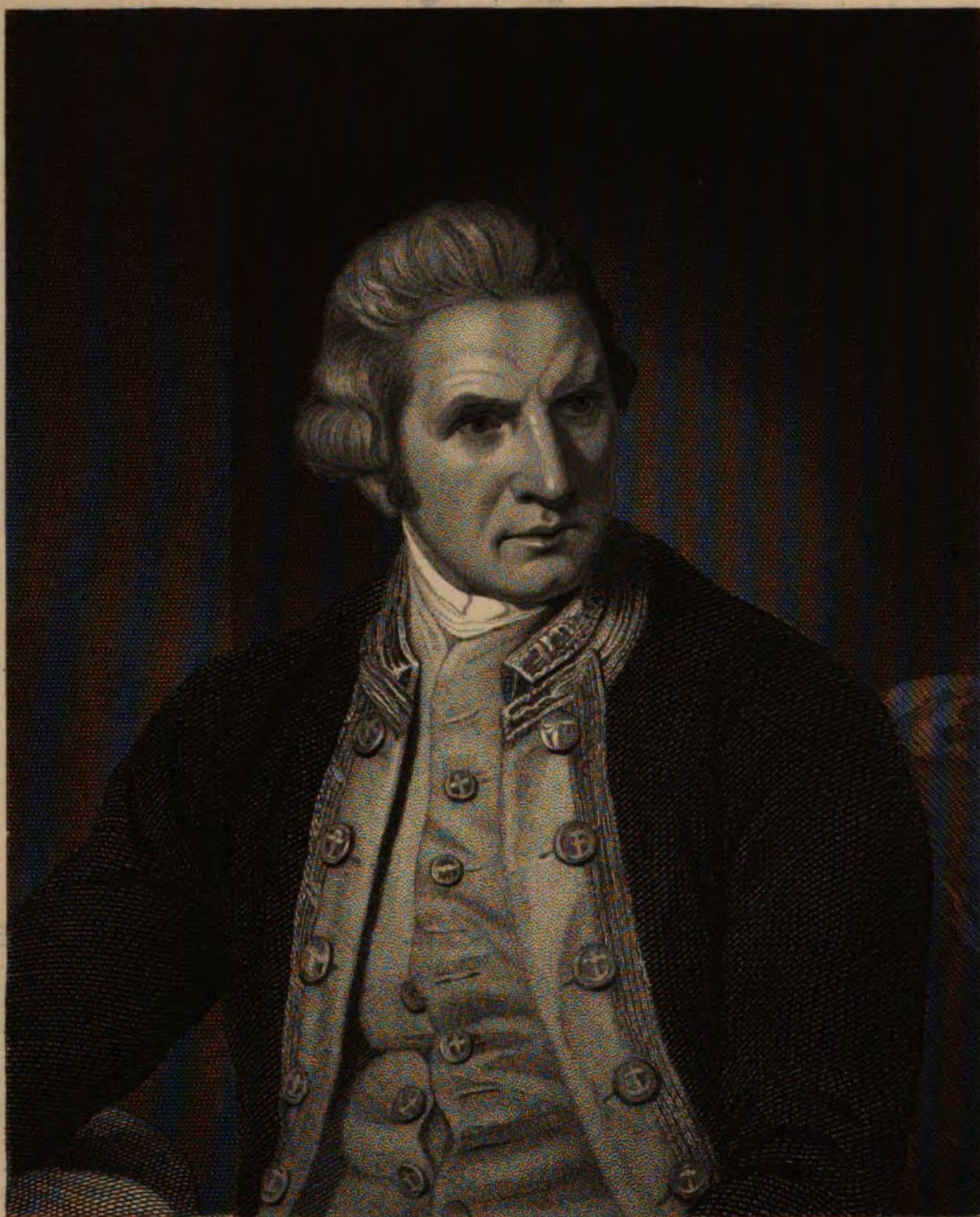
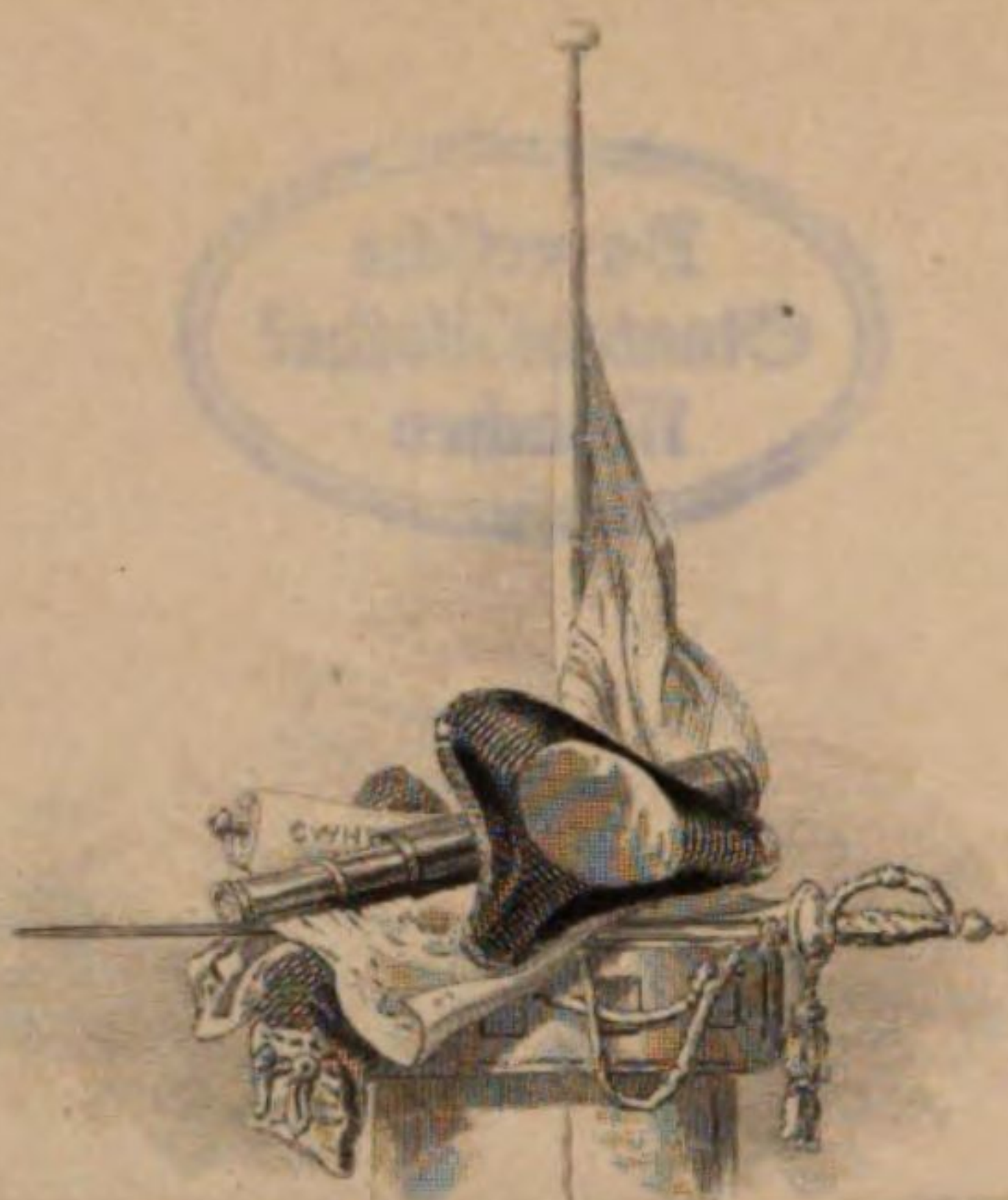
The AMERICAN will reveal things that strike him as being peculiar and wonderful among men. He converses with the chiffonnier of Paris—he is not outdone in daring by the hunter of the Alps—he finds the laws of hospitality held sacred by a brigand of the Appenines—he mingles among the fierce fishermen of Calabria, having to a certain extent followed the track of Spartacus and Hannibal—he embarks in a Mediterranean pirate—and thus having indicated a few of the leading features on which he grounds his ideas, he submits them with confidence to the reader, feeling assured that the SUPERB ILLUSTRATIONS, the products of men whose names are well known, will be a guarantee for the intrinsic value of the Work.

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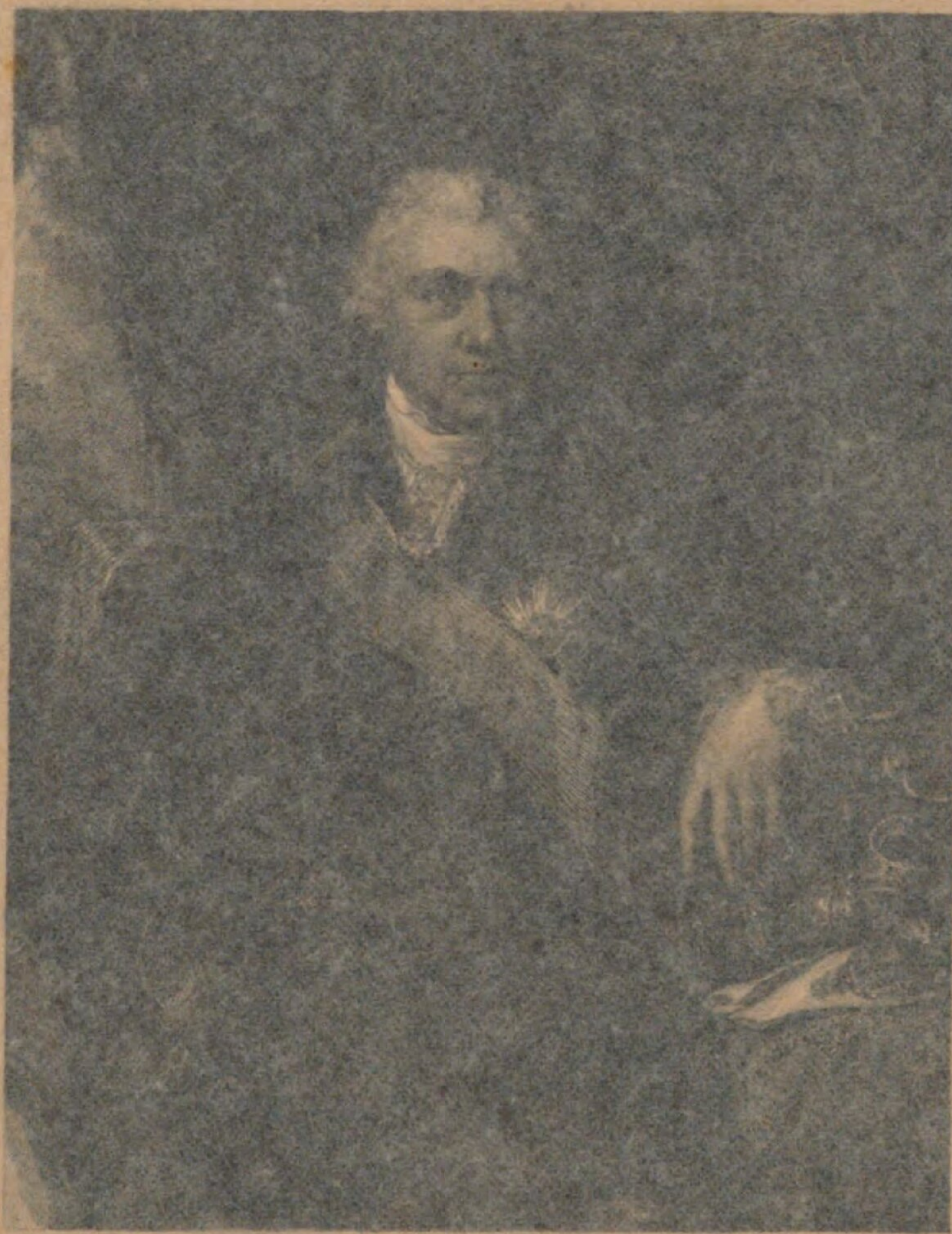
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CAPTAIN COOK.

OB. 1779.

FROM THE ORIGINAL PICTURE BY DANCE,
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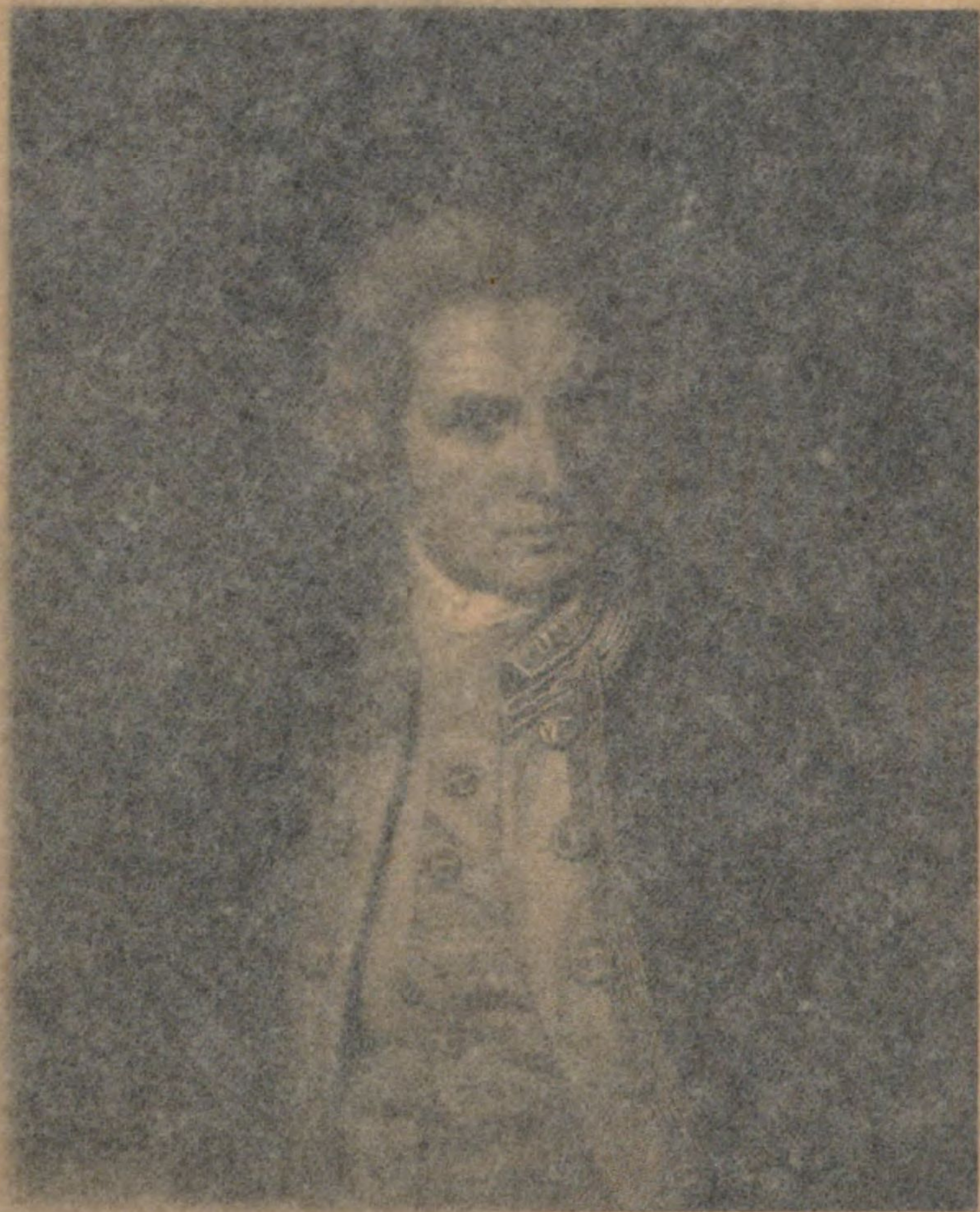
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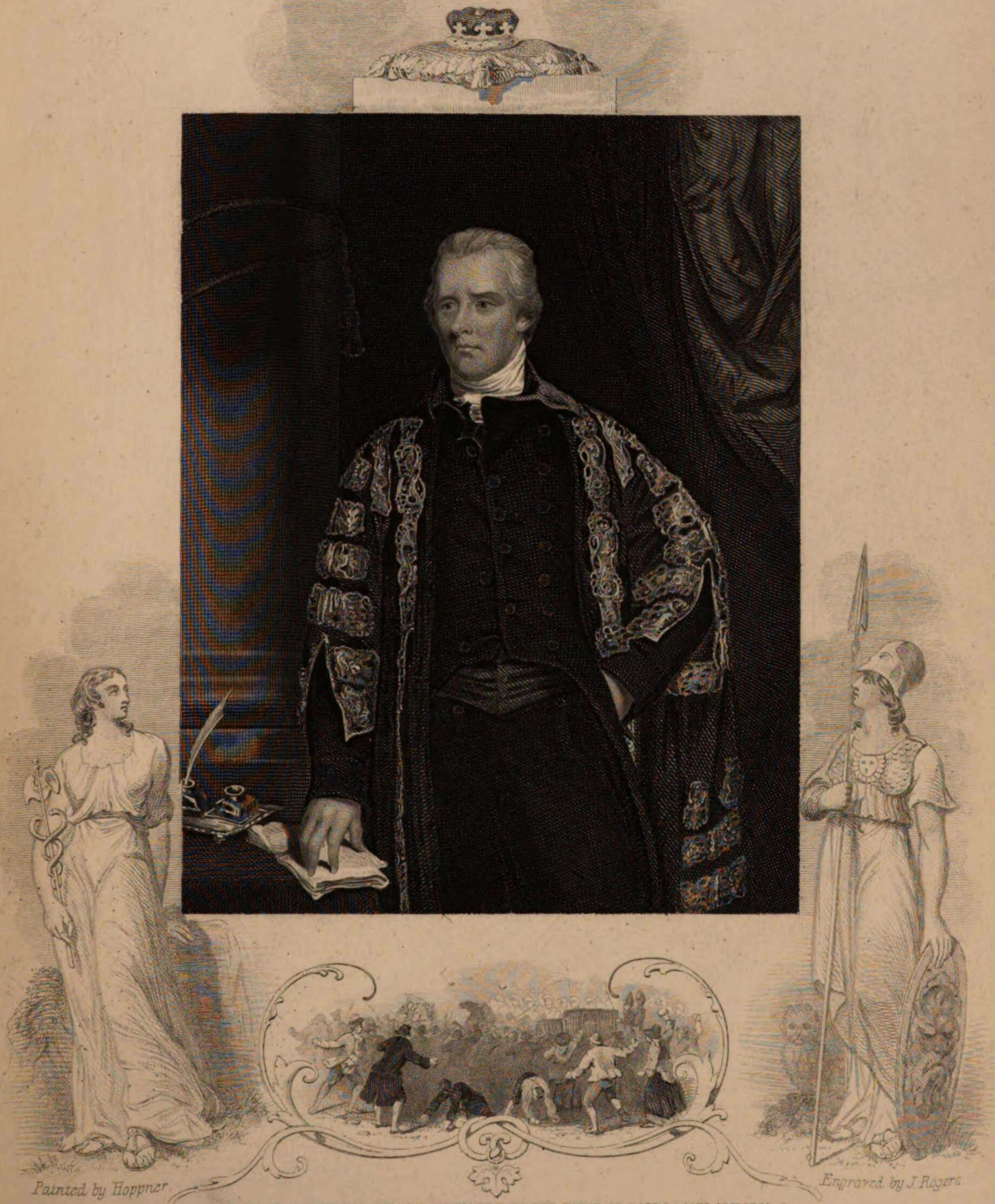
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GEORGE III. ATTACKED BY THE MOB ON HIS WAY TO THE HOUSE OF LORDS, OCT. 20th 1789.

WILLIAM PITT.

'Smiles' Colonies & Commerce

JOHN TALLER & COMPANY LONDON & NEW YORK



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GEORGE III. ATTACKED BY THE MOB ON HIS WAY TO THE HOUSE OF LORDS, OCT^R 29TH 1795.

WILLIAM PITT.

"Ships," Colonies & Commerce.

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The Illustrations by H. Warren : & Engraved by J. Rogers.

This is a highly detailed and ornate map of the Pacific Ocean and its surrounding regions. The map is framed by a decorative border featuring various animals (bear, camel, giraffe, kangaroo) and human figures in traditional attire. The map shows the Pacific Ocean, the Indian Ocean, the Atlantic Ocean, and the Arctic Ocean. It includes numerous place names, such as Japan, China, India, Australia, and the Americas. The map is color-coded, with different colors used for landmasses and water bodies.

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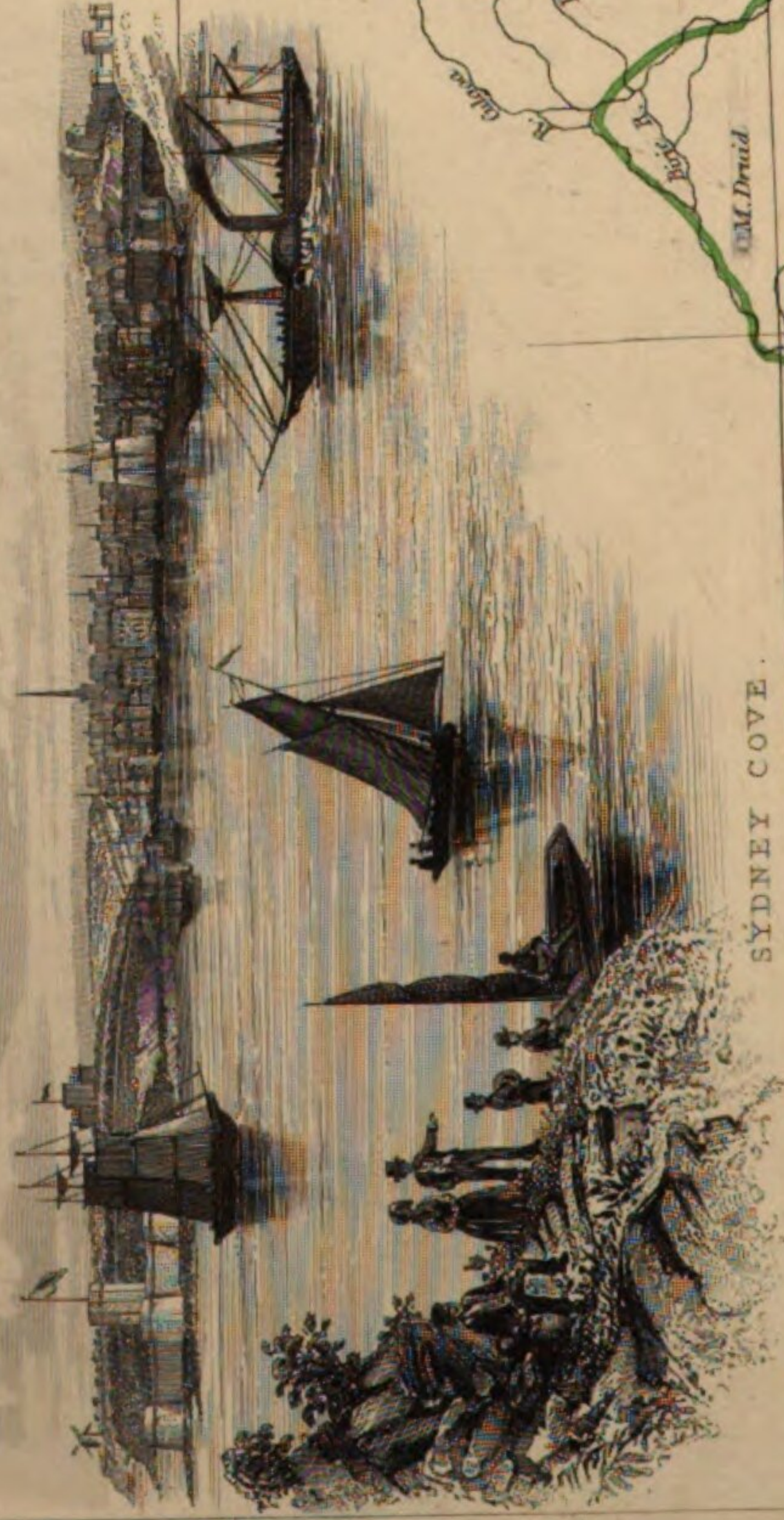
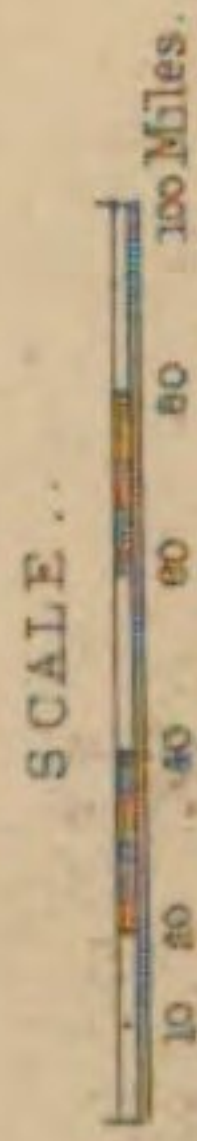
AUSTRALIA



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NEW SOUTH WALES





The Illustrations by H. Warren; & Engraved by J. Rogers.

The Map Drawn & Engraved by J. Rapkin.

JOHN TALLIS & COMPANY, LONDON & NEW YORK.

ALBERTA

ALBERTA OR NEW HOLLAND

CONTENTS

THE PROVINCE OF ALBERTA, AND THE DISTRICT OF SASKATCHEWAN

The province of Alberta, and the district of Saskatchewan, are situated in the north-western part of the continent of North America, and are bounded on the north by the Canadian provinces of Manitoba and Saskatchewan, on the east by the United States, on the south by the United States, and on the west by the Canadian provinces of British Columbia and Alberta. The province of Alberta is situated in the north-western part of the continent of North America, and is bounded on the north by the Canadian provinces of Manitoba and Saskatchewan, on the east by the United States, on the south by the United States, and on the west by the Canadian provinces of British Columbia and Alberta. The district of Saskatchewan is situated in the north-western part of the continent of North America, and is bounded on the north by the Canadian provinces of Manitoba and Saskatchewan, on the east by the United States, on the south by the United States, and on the west by the Canadian provinces of British Columbia and Alberta.

AUSTRAL-ASIA.

BOOK I.—AUSTRALIA, OR NEW HOLLAND.

CHAPTER I.

DISCOVERY, MARITIME SURVEYS, COAST LINE, INTERIOR EXPLORATION, WINDS,
CLIMATE, AND GEOLOGY.

THE British possessions in Austral-Asia are Australia, or New Holland (which contains the several colonies of New South Wales, Port Phillip or Victoria, South Australia, and Western Australia, or Swan River), Van Diemen's island, New Zealand, the Chatham, Auckland, and other lesser islands—the whole comprising a territorial area in the Southern hemisphere nearly as large as Europe.

These extensive regions form an important and most interesting portion of our Colonial Empire, whether viewed in relation to their origin or progress, to their existing or prospective state.

In a favourable position, situated midway between America and Africa, and at the extremity of Asia, they are valuable in a political sense for the increasing capabilities they afford towards the maintenance of British power in the East—and in a commercial sense from their contiguity to the richest and most densely peopled portion of the globe: possessing in themselves (apart from these considerations) a fertile soil and a salubrious clime, they are well adapted for the dwelling of millions of the Anglo-Saxon race,—and even in this early stage of their existence, with many of their resources yet undeveloped, they are outlying farms, already instrumental in supplying England with augmenting quantities of grain, meat, wool, tallow, flax, timber, and other raw products, in exchange for her manufactures.

The insulated continent of Australia, remarkable for its great extent, singular conformation, and recent discovery, first claims attention. Less than a century ago the mere coast line of this "great south land" was an unsolved geographical problem, as its interior is at the present moment; in the

eyes of the learned its very existence was a phenomenon, and some idea may be formed of the strange surmises entertained on the subject, from the wild hypothesis of Blumenbach, that Australia must originally have been a comet or planetary body, which being drawn within the sphere of attraction, fell upon this globe. Even those skilful navigators, and scientific explorers, who have surveyed its coast-line, and, to a limited extent, penetrated the interior, appear unable to arrive at any satisfactory conclusion concerning the operating cause, or the probable epoch of the formation of this vast country—whether it has been in a comparatively modern age left dry by the receding waters of the ocean, or extruded from the bowels of the earth by subterranean fires.

But the interest excited by this question throughout Europe, or by the singular animal and vegetable products of a land of contrarieties, merges into insignificance compared with that created by the extraordinary progress of British colonization at a *distance of 15,000 miles from the parent state*. The earliest settlement is within the recollection of the present generation. Conceived in a benevolent spirit, it was commenced in 1787 by the despatch to Botany Bay of a fleet laden with the refuse of our gaols and penitentiaries. For several years the convicts were repeatedly on the eve of perishing by famine, but stimulated by the hope of regaining their forfeited freedom, directed by the intelligence of their superintendents, and governed by a systematic and humane policy, these outcasts hewed down the forests, subdued the stubborn soil, and earned for themselves a home where "their sins were covered and their iniquity remembered no more."

These pioneers in the wilderness prepared the way, and smoothed the difficulties for their fellow-countrymen whom no crime had expatriated, but who sought at the antipodes the means of obtaining an honourable livelihood under the protection of the flag of their country, in the full enjoyment of the language, laws, and customs of their fatherland. The result of their joint labours is now manifest in the prosperous colony of New South Wales—the proudest monument of British civilization in the nineteenth century.

This success encouraged the settlement at Hobart Town, Van Diemen's Island, in 1801-2; at Swan River, Western Australia, in 1829-30; of Adelaide, South Australia, in 1835-6; of Melbourne, Port Phillip, in 1836; and of Auckland and Wellington, New Zealand, in 1840.

The progress of these Austral-Asian settlements is without a parallel in history, and their condition demands minute and impartial investigation on behalf of the owners of property in those colonies, and of the yet more numerous class of intending emigrants to whom every detail must be important, as a means of enabling them to decide on the locality best calculated to suit their peculiar circumstances.

Having no theory to uphold—no private views to promote—no particular colony to serve, I shall endeavour in this, as in other portions of my work, to lay before the public the fullest amount of information contained in the official documents to which her Majesty's government has granted me access; and, guided by the knowledge personally acquired in Australia, collate from the varied, heterogeneous, and scattered materials furnished by the most trustworthy authorities, every useful or interesting fact which may contribute to the general good, and illustrate the power and resources of the British empire.

Australia, or New Holland, the largest island in the world, lies between the parallels of $10^{\circ} 45'$ and $38^{\circ} 45'$ S., and the meridians of $112^{\circ} 20'$ and $153^{\circ} 30'$ E. of Greenwich. It is separated on the north from the islands of New Guinea and the Moluccas by Torres Strait, and from Timor and other islands in the Eastern Archipelago by the Arafura sea; on the south, from Van Diemen's Island, or Tasmania, by Bass' Strait: its eastern and southern shores are washed by the Pacific, its western and north-western by the Indian Ocean. The latitudinal dif-

ference between Cape York and Wilson's Promontory, the northern and southern extremities, is twenty-eight degrees, equal to 1,680 geographical miles; the greatest distance from east to west is 2,227 geographical miles. The area is estimated at 2,690,810 square miles, and the coast line at nearly 8,000 nautical miles.

The distances and bearings of the several points around the coast are stated to be as follows:—

	Miles.
Wilson's Promontory to Cape Howe, N.E.	250
Cape Howe to Breaksea Spit, N. a little E.	950
Breaksea Spit to Cape York, N.W.	1,150
Cape York to Cape Van Diemen, W.	900
Cape Van Diemen to North-West Cape, S.W.	1,300
North-West Cape to Cape Leeuwin, S.	900
Cape Leeuwin to Great Australian Bight, E. a little N.	1,200
Great Australian Bight to Wilson's Promontory, S.E.	1,100

Circumference in round numbers 7,750

The proportion which Australia bears to the other divisions of the globe has been thus calculated by the distinguished French navigator, Du Freycinet:—

Divisions.	French Leagues.	Proportion.
Asia	2,200,000	17
America	2,100,000	17
Africa	1,560,000	12
Europe	501,875	4
Australia	384,375	3

Viewing Van Diemen's Island as a portion or prolongation of Australia, we may consider it as forming one of the marked tripodal capes or promontories which stretch from Asia, Africa, and America, towards the Antarctic Circle.

Discovery.—To what European or Asiatic nation the existence of Australia was first known, and when or by whom it was discovered, is a matter of great uncertainty, from the vague and often inconsistent statements by which the claims of various navigators are supported. Although we have no positive evidence, there appears much probability that the Chinese were aware of the existence of "a great south land." Abundant records remain to prove, that from a very early period to the thirteenth century, they were a thriving and enterprising people, engaged in an extensive maritime trade. M. de Guignes says, "Nous trouvons dans les annales Chinoises des VII. et VIII. siècles, une route par mer depuis la Chine jusqu'à l'embouchure de l'Euphrate." The Arabian traveller, Ebn Wuahab, (A.D. 877,)

points out the route pursued at that time, in the voyage from Bussora to Canton; and Edrisi, writing in 1156, states, that Muscat, on the coast of Arabia, was annually frequented by ships from China. They had also, together with the Hindoos, constant commercial intercourse with Java and the Eastern Archipelago. It may, moreover, be worth noting in this place, that the nutritious trepang, or sea-slug, (*bêche de mer*), which has for ages been a favourite luxury with the Chinese, is found in great abundance on the northern shores of New Holland, which are, even to the present time, annually frequented by a fleet of fishing prows, from being the chief source from whence this singular edible is obtained. It may be urged, that this fact renders it the more unlikely that the Chinese were acquainted with the island, since, as a fishing-station of any value, clear records concerning it would be extant; but, on the other hand, we must not only remember the very slight knowledge we possess of the annals and charts of the Chinese, but also the serious injury, and indeed the almost total destruction of their maritime traffic by the piratical depredations of the Portuguese, Spaniards, and Dutch, who, in many instances, buried in oblivion important geographical information from the most selfish motives. On the island of Timor, distant only 250 miles from the coast of Australia, there are many Chinese, but how long they have been established there we have no means of ascertaining.

Among European nations, the earliest claim to the discovery of *Terra Australis* is made by the French, whose pretensions rest upon the assertion of de Brosse and the Abbé Prevost, that Paulmier de Gonneville, a French captain, who sailed from Honfleur in 1503, lost his reckoning, and was drifted into an unknown sea, from which he escaped by observing the flights of birds towards the south, and following them. Gonneville made the land, on which he lived for six months, refitting his vessel, and living on friendly terms with the natives, whom he represents as having made some advances in civilization. These could not have been the Australian savages; they may have been the people of New Zealand or of Madagascar. The distinguished hydrographer, Flinders, one of the best authorities on the subject, considers this claim unfounded, and adds, that the proofs adduced in its support themselves demonstrate, that it was not any part

of Australia, but Madagascar that Gonneville discovered, and from whence he brought a native, called Prince Escomerie, to Normandy. The discovery of a maritime route to the East Indies, *via* the Cape of Good Hope, by Vasco de Gama, under the flag of Portugal, in 1498, and of a passage to Asia, through the straits which separate Cape Horn from Patagonia, by Magellan, or Magalhaens, under the flag of Spain, 27th November, 1520, led to an extended acquaintance with the Eastern seas; and as it is certain that, during the earlier half of the sixteenth century, the Spanish and Portuguese navigators pushed their researches into the South Pacific, it is probable that the claim made by them to the discovery of at least the northern coast of Australia, is not wholly unfounded, though, if made, it was unattended by any practical result.

In 1526, Don Jorge de Menezes, who was appointed to the government of the Moluccas, sailed from Malacca, and spent some months in a port supposed to be in Papua or New Guinea. In the same year, Alvarez de Saavedra sailed from a port in Mexico in search of gold, and discovered Papua, and some of the adjacent islands.

In 1543, Ruy Lopez de Villabolo ranged the New Guinea and other coasts.

In 1567, Alonzo de Mendana sailed from Lima, and discovered the thirty-three islands, which he named Solomon's Islands, "to the end that the Spaniards, supposing them to be those islands from which Solomon fetched gold to adorn the temple, might be the more desirous to go and inhabit them." In his second voyage he could not find the islands: he died seeking them, and was succeeded by Quiros, who abandoned the search when only forty leagues distant from them.

In the British Museum there is a manuscript book of charts, entitled an Hydrographic, compiled by John Rotz in 1542, and dedicated by him to Henry VIII. of England. In one of them is rudely delineated an ill-defined land, situated to the south of Java, and termed *Jave le Grand*, but the chart terminates abruptly, only a portion of the north and north-west coast of this territory being laid down. There is also a large manuscript chart on the Mercator plan in the Museum, numbered in the catalogue 5,413, prepared for the dauphin of France, which Mr. Holmes, who has charge of the chart department, and has paid much attention to the subject, supposes to have been

constructed about the year 1536. In this chart the coast line of the African and American continents, south of the equator, is traced with some degree of accuracy. This document likewise contains part of a country inscribed *Jave le Grand*, on whose shores are depicted men and huts, and immediately adjacent to Cape Horn, to the southward, is what appears to be part of a continent, on which is marked *La Terre Australie*; this would lead us to suppose that the hydrographer, whoever he may have been, was impressed with the belief, which then and long afterwards prevailed, of the existence of a great continent, running north and south from 33° to 64° S. lat., its northern coasts stretching along the South Pacific to an immense distance, and extending at least from the straits of Magellan to New Zealand. Leaving the region of conjecture, we know for a certainty that on the 21st December, 1605, Fernandez de Quiros sailed with three vessels from Callao, in Peru, one of the objects of his expedition being to search for the *Terra Austral*, a continent supposed to occupy a considerable portion of that part of the southern hemisphere lying westward of America. Quiros, after discovering several islands, came to a land which he named *Australia del Espiritu Santo*, supposing it to be a part of the great southern continent. Luis Vaes de Torres, separated from Quiros, coasted along the Louisiade Archipelago, sighted the hills and islands of Cape York in 11° S., and spent two months in surveying the intricate navigation of the strait by which the *Terra Austral* is divided from New Guinea. We know, however, little of his proceedings, or of those of Quiros, as the accounts were transmitted direct to the king of Spain, who kept them from the public, and the existence of the dangerous channel, now called Torres Strait, was generally unknown, until rediscovered and passed by captain Cook in 1770. Fortunately for his reputation in after ages, a copy of a letter of Torres to the king of Spain, dated Manilla, 7th July, 1607, was deposited in the archives of the Spanish settlement at Manilla, where it was found by Mr. Dalrymple (himself an hydrographer), after its capture by the British troops in 1762. The Englishman, with true generosity, gave the name of the enterprising Spaniard to the strait he had discovered.

Torres describes the strait as being filled by "an archipelago of islands without number; the bank shoaler in the eleventh

degree of latitude; the people black, corpulent, naked, armed with lances, arrows, and clubs of stone." This description of the people refers to New Guinea rather than Australia, from the mention made of arrows. Torres adds, "we caught in all this land twenty persons of different nations;" from which it would appear that Torres adopted the policy of Columbus, Cabot, and other early navigators, in seizing on the natives of new found countries, to testify to their respective governments the reality of their voyages.

On the 11th of November, 1605 (the same year in which Quiros and Torres sailed from Peru) the Dutch yacht, named *Duyfhen*, was dispatched from Bantam, the chief seat of government in the Eastern Archipelago, to explore the islands of New Guinea.

The *Duyfhen* sailed along what was thought to be the west shore of that country, to $13^{\circ}45'$ S. lat., but which was in reality the north shore of *Terra Austral*, and then, being in want of provisions, proceeded to Banda, where she arrived in June, 1606, having unconsciously visited the "Great South Land," of which, in 1623, the yachts, *Pera* and *Arnhem* were sent in search from Amboyna. Jans Carstens, the commander of the expedition, with eight of his crew, was murdered on the coast of New Guinea; but the survivors pursued their voyage, and discovered "the great island of Arnhem and the Spult, or Speilt." (What is meant by "the Spult" it is now difficult to understand, but in the old charts a river is marked by that name, which is probably here intended to signify the land in its vicinity.) The *Arnhem* then returned to Amboyna; the *Pera* proceeded along the coast to Cape Keer Weer, (*Turn-again*, supposed by some to be the west coast of New Guinea, by others to be the east coast of the Gulf of Carpentaria,) where the *Duyfhen* had previously been, and explored the coast as far as 17° S. lat. There is, however, much discrepancy in the accounts of this and other early voyages. In the years 1616, 1618, 1619, and 1622, the west coast was noted by several outward-bound vessels, among others by the *Endraght*; and in a manuscript chart, by Eesel Gerrits, dated 1627, the first discovery of it is attributed to Dirk Hartog, commander of the *Endraght*, bound to India (A.D. 1616), who saw the coast in $26^{\circ}30'$ S. lat., and sailed northward to 23° , giving the name of *Landt de Endraght* to the land thus surveyed. An important part of this discovery was the roadstead, called by his

name, at the entrance of a sound lying a little S. of 25° , afterwards named Shark's Bay, by Dampier. Upon one of the islands forming the roadstead, there was found, in 1697, and afterwards, in 1801, half buried in the sand, with the rotten remnant of a post attached to it, a tin platter, bearing an inscription, of which the following (as nearly as it could be deciphered) is a translation:—"Anno 1616, 25th October, arrived here the ship *Endraght*, of Amsterdam, first merchant, Gilles Miebaïs, of Luik, Dirk Hartog, of Amsterdam, captain. They sailed from hence for Bantam, the 27th do., A° 1616." The names of the under merchant and chief mate are illegible. In July, 1618, the *Mauritius*, another outward bound Dutch ship touched at Willem's River, near the North-West Cape, and a year after captain Edel, commanding a Dutch vessel, touched on the coast, and gave his own name to the land from 29° to $26^{\circ} 30'$ S. lat. The great reef lying off this land, called *Houtman's Abrolhos*, was discovered at the same time.

The *Leeuwin*, also outward bound, fell in with the coast as far as 35° , and sailed along to the north, giving its name to the Cape, in $34^{\circ} 19'$ S. lat., $115^{\circ} 6'$ E. long.*

In 1628, the *Vianen*, one of the seven ships which returned to Europe under the command of Carpenter, the Dutch governor-general, from whom the deep gulf on the north coast takes its name, reported having seen the shore, and the circumstance is thus stated in the Dutch records: "the coast was seen again accidentally, and coasted 200 miles without gaining any knowledge of this great country, only observing a foul and barren shore, green fields, and very wild, black, barbarous inhabitants." This part was subsequently called De Witt's Land, but by whom does not appear. In Thevenot's collection of charts, &c., there is an account of the shipwreck of Francisco Pelsart, in the *Batavia*, on the 4th June, 1629, on the Abrolhos. Pelsart proceeded along the north-west coast in a small decked boat, crossed thence to Batavia, and returned with succours for his men; too late, however, for they had been murdered by the savages.

The south coast was accidentally discovered in January, 1627, by the Dutch ship, *Gulde Zeepaard*, outward bound from Hol-

land. It was called Nuyts' Land, from Pieter Nuyts, who is supposed to have commanded the *Zeepaard*, and is said to have traced it for 1,000 miles from Cape Leeuwin, and laid down a number of positions with great accuracy. The Dutch government being anxious to ascertain how far this great south land extended towards the antarctic circle, despatched Captain Abel Jans Tasman from Batavia, with two vessels, on the 14th August, 1642. Tasman, after touching at the Mauritius, steered south and east, and on the 24th November made some high land in 40° S. lat., $163^{\circ} 50'$ E. of Teneriffe, which he named in honour of the governor-general, Antony Van Diemen's Land, and sailed along, not supposing it to be an island; he anchored in Storm Bay, then pursuing an east and south course, he discovered part of the west side of New Zealand, (of whose insularity he was also unaware, and considering it to be a part of *Terra Australis*, he named it Staten Land), the Friendly and Prince William Islands. In 1644, Tasman was sent by the Dutch East India Company on a second voyage of discovery, and directed, after passing the land of Arnhem, to "follow the coast further as it may run westward or southward, endeavouring by all means to proceed, that we may be sure whether this land is divided from the *Great Known South Land* or not." From this expression, it is evident that the Dutch had acquired a knowledge of some part of the *Terra Australis*, to which they about this time gave the name of New Holland. Unfortunately no account of this voyage has ever been published, except that contained in a garbled extract from Tasman's journal by Dirk Rembrantz, and translated in 1776, but his track is supposed to be indicated by the names given to different places, namely those of Van Diemen (as in a former instance), two of the council who signed his instructions, and of Maria, the daughter of the governor-general, to whom he was attached.

It is very probable that the Dutch East India Company did not consider that New Holland was in any way useful from its productions, and much feared the character of its inhabitants. Jans Carstens, who commanded the *Pera* and *Arnhem* in 1623, says, "in this discovery we found everywhere shallow water and barren coasts, islands altogether thinly peopled by divers cruel, poor, and brutal natives, and of very little use to the company."

Witsen, in his "Notes," alludes to Tasman's

* The above statements are derived chiefly from the instructions given to Tasman when sent from Batavia on his second voyage of discovery, and signed by the governor-general Antonio Van Diemen, and four members of the council of Batavia.

describing the people on different parts of the coast as "bad and wicked," "shooting arrows," "throwing stones," "living very poorly," "feeding upon roots;" "there are few vegetables, and the people use no houses."

In 1663 Thevenot published his chart of the west coast of the "*Great South Land*."

In 1688 Dampier, the most observant navigator of his age, visited the west coast with the Buccaneers, and described it as low and sandy, with scarcely any vegetation on its shores. The Buccaneers careened and refitted in about 16° S. lat.

In 1699 Dampier was expressly sent as pilot in H.M.S. *Roebuck*, on a voyage of discovery, and visited the west and north-west coasts.

In Dampier's *New Voyage round the World* published in 1703, a chart of the world therein engraved only shews part of the north-west and south coast of New Holland, which is joined on the east to some land stretching towards the equator, and joining the islands of the Eastern Archipelago. The most southern part of New Holland marked, is in about 32° S. lat., and "Diemen's Land" is placed ten degrees further to the southward.

Dampier's track in 1699 was from Sumatra to the north-west coast of New Holland, whence he proceeded to Timor in September 1699; in the chart of his voyage, he lays down the coast as far north as the gulf of Carpentaria, traces part of the coast of New Guinea, but leaves an unexplored tract between that island and Australia, nearly in the position of Torres Straits; in fact direct north from the land we now call Cape York.

In recording his proceedings on the west coast, he states, "I spent about five weeks in ranging off and on the coast of New Holland, a length of about 300 leagues." He subsequently discovered New Britain.

1696.—William de Vlaming was sent in search of a Dutch ship, lost in 1684-5; he visited the west coast, found black swans near Rottenest Island, and named the place *Swan River*. He then sailed north as far as 21° 28'.

In 1710, captain Woodes Rogers was sent to the South Seas, with two vessels; Dampier was pilot; they sailed through what they termed *New Guinea Straits*.

1767.—Captain Carteret sailed through the strait which separates New Britain from New Ireland.

1721.—The Dutch East India Company

fitted out a squadron for discovery, under captain Roggewein, who lost one of his ships on the east confines of Australia. Having landed in New Britain, he was attacked by the natives, and returned without accomplishing any satisfactory results.

The justly celebrated captain Cook, in his exploring and scientific expedition with H.M.S. *Resolution* and *Adventure*, on the 6th of October, 1769, discovered the east side of New Zealand; continued surveying the coast until the 31st of March, 1770, when he proceeded to New Holland, and, to use his own words, "surveyed the east coast of that vast country which had not before been visited, and passed between its northern extremity and New Guinea;" thus demonstrating beyond a doubt the insularity of New Holland.

The first port in Australia which captain Cook entered was *Botany Bay*, in April, 1770; thence he sailed to the northward, and passed *Port Jackson*, which, from its narrow entrance at the "heads," he supposed to be merely a boat harbour, and gave it the name of the sailor then on the lookout at the mast-head. At *Cape Tribulation* on the north-east coast of Australia, the ship of captain Cook struck on a coral reef; he refitted and repaired her in the adjacent *Endeavour Bay*, and then proceeded to solve the doubt of New Holland being separated from New Guinea and the adjacent lands.

Captain Marrion, a French officer, with two ships, skirted the coast in 1772, in search of the supposed southern continent, and proceeded to New Zealand, (which had been rediscovered by captain Cook,) where he was murdered by the natives in the Bay of Islands. In 1768 the French navigator, De Bougainville, visited the Australian coast. In 1791, the south coast was visited by captain George Vancouver, on his way to the north-west coast of America; he made the land on the 26th September, at Cape Chat-ham, in 35° 3' S. lat. and 116° 35' E. long.; then sailed east along the coast till the 28th, when he anchored in a sound, which he named after George III. Bad weather prevented his doing more than verifying a part of the coast laid down in Nuyt's chart of 1627.

On the 9th March, 1773, captain Tobias Furneaux, second in command in the expedition under captain Cook, in H.M.S. *Adventure*, made the south-west cape of Van Diemen's Island, and steered east, close to the rocks called *Maatsuyker's* by Tasman,

afterwards anchoring in what he took to be Storm Bay, (which he called Adventure Bay), so named by Tasman in 1642; not, however, the Storm Bay laid down in the present charts, but that now termed D'Entrecasteaux's channel, which runs inland for ten leagues, and communicates with the true Storm Bay of Tasman. Captain Furneaux then sailed along the Van Diemen coast to the northward, to discover whether it was separated from New Holland, or was a peninsula forming part of the main land; but he finally steered for New Zealand, giving it as his opinion that "there was no strait between Van Diemen's Land and New Holland, but only a very deep bay." Captain Cook, with H.M.S. *Resolution* and *Discovery* made the south-west Cape, 24th Jan. 1777, and after steering eastward, anchored, as Furneaux had done, in Adventure Bay on the 26th; but captain Cook proceeded on his voyage, still ignorant of the insularity of the land.

In 1792, Bruni D'Entrecasteaux, a French rear-admiral, with two ships of war, *La Recherche* and *L'Espérance*, made the coast of Van Diemen's Land, to obtain supplies of wood and water; and while intending to enter the Storm Bay of Tasman, entered the Adventure Bay of Furneaux, up which he sailed thirty miles, and found it to be separated by a small island from Storm Bay. The island he named *Bruny*, and the channel *D'Entrecasteaux*, and then sailed to the eastward without ascertaining that Van Diemen's Land was insulated.*

Captain Bligh, in 1788, in the *Bounty*, and in 1792 with the *Providence* and *Assistant*, and captain John Hayes, of the Bombay Marine, with the private ships *Duke* and *Duchess* from India, in 1794, visited different parts of the Australian coast, without adding much to our geographical knowledge.

The survey of admiral D'Entrecasteaux extended from Cape Leeuwin to 132° E. long. in Australia, and comprised the southern extremity of Van Diemen's island, including the river Derwent and the channel which bears the name of the accurate surveyor. Captain Flinders states that "the charts of the last survey, particularly those relating to the bays, ports, and arms of the sea of the south-east of Van Diemen's Land, and constructed in this expedition by M. Beau-

temps Beaupré, and his assistants, appear to combine scientific accuracy and minuteness of detail, with an uncommon degree of neatness in the execution. They contain some of the finest specimens of marine surveying perhaps ever made in a new country."

The able, but unfortunate French navigator, La Perouse, visited the east coast of Australia with the French ships of war, *La Boussole* and *L'Astrolable*; these vessels were last seen by any Europeans in January, 1788. When captain Phillip, R.N., and the fleet of convicts sent out to form the penal settlement in New South Wales, were removing from Botany Bay to the more eligible adjacent station of Port Jackson, La Perouse was entering Botany Bay to refit. The British and French commanders exchanged the civilities common to their gallant profession. La Perouse perished shortly after at the Mannicolo islands: it is supposed that the vessels were lost on a coral reef. After a lapse of forty years, captain Peter Dillon, in 1826, discovered relics belonging to the French ships, and placed beyond a doubt the period and place of their loss.

After the formation of the British penal settlement at Port Jackson (Sydney), in 1788, attention was directed to the eastern and southern shores of Australia; and Mr. Bass, surgeon of H.M.S. *Reliance*, and lieutenant (afterwards captain) Flinders in a little boat called *Tom Thumb*, eight feet long, aided only by a boy, commenced a survey of the coast. Mr. Bass was afterwards reinforced with a whale boat, six men, and six weeks' provisions; in this open boat, and in boisterous weather, he explored the south-east coast for 600 miles, entered what Furneaux considered a "deep bay," and in 1798, became satisfied that there was a strait separating Van Diemen's Land from New Holland. On his return to Sydney, governor Hunter was induced to verify the results of Mr. Bass's observations by sending lieutenant Flinders and Mr. Bass in the colonial schooner *Norfolk*, of twenty-five tons burthen; with this little vessel, they sailed through the strait now called Bass's Strait, and by circumnavigating Van Diemen's Land demonstrated for the first time its insularity, and completed the coast line of Australia. The result of these remarkable labours of Bass and Flinders, was a survey of the coast

* The mistake of D'Entrecasteaux was then a very probable one, for notwithstanding our extended knowledge of the coast, a similar error was committed during the night by a vessel in which the author sailed some

years since. Navigators should be cautious in approaching this part of the coast, as they are very liable to be deceived by the headlands.

line from Sydney to Western Port, of the islands in Bass's Strait, of the bays and coves of the river Derwent, and of Tasman's Peninsula. Sir John Franklin, recently lieutenant-governor of Van Diemen's Island, whose presumed loss in the arctic regions the nation now mourns, began his noble career under Flinders. At his own cost, Sir John erected, in 1841, a lofty stone obelisk on Stamford hill, near Port Lincoln, South Australia, to commemorate the great services of "the illustrious navigator and his honoured commander." Flinders himself recorded a high eulogium on his "high-spirited and able colleague," surgeon Bass, who well deserves "an honourable place in the list of those whose ardour stands most conspicuous for useful knowledge." In December, 1800, captain Grant, in H.M. brig *Lady Nelson*, passed through Bass's Straits, and explored the coast from Port Western to $140\frac{1}{4}^{\circ}$ of E. long. In 1802, lieutenant John Murray, who succeeded captain Grant in the command of the *Lady Nelson*, discovered Port Phillip ten weeks previous to the arrival of captain Flinders in that bay.

The survey of captain Baudin of the French navy in the *Geographe*, was contemporaneous with that of Flinders; it comprised the southern coast of Australia between $35^{\circ} 40'$ and $37^{\circ} 36'$ S. lat., and $138^{\circ} 58'$ and $140^{\circ} 10'$ E. long., a coast line of about 150 miles in length, devoid of rivers or inlets; also the north-west coast, from Cape Leeuwin to Rottenest Island, Swan River, and thence partially to Cape Londonderry on the north coast.

In April, 1802, Baudin and Flinders met in the neighbourhood of Spencer's Gulf, and although their respective countries were engaged in fierce hostilities, the commanders met on board the *Geographe*, and communicated freely to each other all the information that was likely to be useful. The expedition of captain Flinders was thought to be secured against the chances of war by a passport granting it protection, assistance, and free ingress and egress to and from the ports of the French republic; but when Flinders, driven by stress of weather from the west coast of Australia, was obliged to seek shelter at the Isle of France, or Mauritius, then a French colony, he was most unjustly and cruelly detained a prisoner for eight years, by the governor-general De Caen, and his charts seized, despite passports and remonstrances.

The gradual progress of discovery on the

Australian coast has now been chronologically detailed to the commencement of the present century. The subsequent voyages and discoveries of those skilful and enterprising British seamen, of Flinders (1801-2), King (1818-20), Wickham and Stokes (1837-43), of Blackwood (1842-46), of Stanley, Bremner, Chambers, Heywood, Hobson, and other naval officers, have furnished valuable nautical surveys of the coast line of this vast island, the whole of which now appertains to the British empire.

The surveys of Flinders include the south, west, and north-west coasts of Australia to the Gulf of Carpentaria, and high credit is due to this intrepid and persevering surveyor; captain P. P. King's invaluable labours include 2,700 miles of coast, principally on the north and east, and involved 40,000 miles of sailing. The interesting examinations of captains Wickham and Stokes commenced on the east coast, and included the Gulf of Carpentaria, Torres Straits, the north and north-west coast, Dampier's Archipelago, Houtman's Abrolhos, the Swan River coast, Bass's Strait, and Adelaide, South Australia. Captain Blackwood's meritorious exertions were chiefly devoted to Torres Straits, the dangerous reefs and islands in that route, and the north-east coast of Australia.

Reserving for separate consideration the aspect of the several colonies in Australia—viz.: *New South Wales* on the east coast; *Port Phillip, or Victoria*, on the south-east, adjacent to Van Diemen's Island; *South Australia*, on the south coast, westward of Port Philip; and *Western Australia, or Swan River*, on the western and south-western shores, a few general remarks on the physical features of Australia may be useful.

PHYSICAL FEATURES.—The outline of Australia is singular: the parallelism of the coast lines gives a geometrical form to the island; the greatest width, from east to west, is in the parallel of 25° ; the greatest length, from north to south, is from Cape York to Wilson's Promontory. Nearly in the same meridian, viewing Van Diemen's Island as a continuation of Australia, its projection on the south, in a direct line with the Carpentaria promontory on the north, is remarkable. The deepest indentations of the island are opposite each other on the north and south coasts. The east and west coasts have nearly the same general configuration; and at Sandy Cape, on the east coast, and to the northward of

the same parallel, on the west coast, at North-West Cape, there are two peculiar projections of the land. The trend on the shore from west to north is parallel with that from south to east; the indentations between Coburg peninsula and Cape Londonderry on the north-west, nearly correspond with the expansions on the south-east; the trend of the coast from Kangaroo Island towards Fowler's Bay on the south, is parallel with that of the opposite coast line of the Gulf of Carpentaria: finally, the great Australian Bight on the south somewhat corresponds with the protrusion of Arnhem's land in Northern Australia. The peculiar external form of Australia may be, in some degree, owing to the different degrees of force to which the land is subjected by the surrounding waters. On the south, where the coast is not protected by Van Diemen's Island, the tremendous effect of the unbroken roll of the ocean from the pole is manifested in the deep Bight. On the north-west the full swell of the Indian Ocean produces a corresponding slope of the coast; on the north-east the Pacific flows with majestic sweep from the American continent; and on the north, the fluctuating pressure caused by the monsoons is broken by the islands of the Eastern Archipelago.

The coast-line of Australia is marked by deep gulfs, fine bays, and capacious havens. On the north is the large gulf of Carpentaria, with York Harbour or Endeavour Strait at the north-east limit, and Melville Bay at the north-west entrance; Van Diemen's Gulf, Cambridge Gulf, Admiralty Gulf, Brunswick Bay, Queen Charlotte's Channel, Melville Island, Raffles Bay, and Port Essington, afford many secure ports on the *north* and north-west shores. On the *west* there are Prince Regent's inlet, Doubtful Bay, King's Sound, Buccaneer's, and Dampier's Archipelagos, Exmouth Gulf, Shark's Bay, Freycinet Harbour, and Swan River. Port George the Fourth, Hanover Bay, and Camden Sound, lying close to each other, are noble havens, and have a fine tract of country in their rear. On the *south*, King George's Sound, Fowler's Bay, Spencer's (900 miles deep) and St. Vincent's Gulfs, Encounter Bay, Portland Bay, Port Phillip, and Western Port. On the *east* are Jervis Bay, Botany Bay, Port Jackson, or Sydney, Newcastle, Port Stephens, Port Macquarie, Moreton Bay, Hervey Bay, Port Curtis, Keppel Bay, Port

Bowen, Princess Charlotte Bay, and numerous secure roadsteads situated on the north-east, between the Barrier reefs and the coast.

Australia, like the other continents, has an island of considerable magnitude attached to it, namely, that of Van Diemen, or Tasmania, which lies at its southern extremity. The other principal islands are Melville and Bathurst on the north, Kangaroo, near St. Vincent's Gulf, and Groote, in the Gulf of Carpentaria, Great Sandy Island on the east, and exactly opposite it, on the west coast, Dirk Hartog's Island. There are several smaller islets and groups, viz.—Prince of Wales' Island, off Cape York, the Wellesley, Pellew, and others, in the Gulf of Carpentaria; Wessel, and English Company Isles, near Melville Bay; Buccaneer's Archipelago of islets, south-west of Cape Londonderry, Dampier's Archipelago, Barrow, and other islands north-east of the north-west cape, off De Witt's Land; Bernier and Dorre, off Shark's Bay, Rottenest, &c.; at Swan River, Recherche Archipelago, on the south coast, between King George's Sound and west of the great Australian Bight; Nuyts' Archipelago; Investigators' and Flinder's islands, west of Spencer's Gulf; King's, Furneaux, and others in Bass's Straits, between Australia and Van Diemen's Island. The south-east coast is deficient in islands, and has few indentations like the north or south coasts. From Wilson's promontory to Moreton Bay there are no islands but those of Stradbroke and Moreton, and the Solitary Isles north of Port Macquarie. Howe's and Ball's Pyramid Islands, east of Port Macquarie, are 400 miles from the shore, and do not partake of the features of Australia. They are very remarkable, and rise in basaltic columns from the sea. Proceeding to the northward, along the east coast, we find Great Sandy Island, the Capricorn group, (where the coral islets commence), including Bunker Islands, Keppel Island, the Northumberland, Percy, Hillsborough, Palm, Lowe, and other minor islands. The Capricorn group of islets, on the north-east coast, have the tropic of Capricorn and the 152nd degree of E. long. passing through them.

Coast Rivers.—In no other part of the globe could a similar extent of coast line be found with so few navigable rivers. The *Murray*, in South Australia; the *Hunter* and *Brisbane*, in New South Wales; the *Albert*, disemboguing into the Gulf of Carpentaria;

the *Adelaide*, into Van Diemen's Gulf; the *Victoria*, into Cambridge Gulf; the *Prince Regent*, *Fitzroy*, and *Glenelg*, on the north-west coast; and the *Swan*, in Western Australia, are the only streams navigable for ships for even a few miles from the ocean, where their entrances are barred.

So far as the country is known one mountain range bounds the coast from Bass's Straits to York Peninsula, and is continued in what Leichardt calls a "collar" round the Gulf of Carpentaria; on the western shore ranges run parallel with the coast, and slope off towards the east and north. Probably the highest mountains will be found at the Australian Alps, in the south-east, and at Arnhem and Tasman land in the north-west. The dip of the high land on the east coast appears to be from south to north, viz., from Mount Kosciusko, 6,500 feet high in the Australian Alps, in $36^{\circ} 20'$ S., to Mount Hinchinbrook, 3,500 feet, in $18^{\circ} 22'$ S.; Cape Direction, 1,250 feet, in 13° S.; and Pudding Pan Hill, only 384 feet in $11^{\circ} 19'$ S. From Fowler Bay, in the Australian Bight, westward to King George's Sound, there are low cliffs of a calcareous marine formation, or sandy dunes, with occasional points of granite; the general elevation being from 300 to 500 feet, without a single watercourse for 800 miles; and according to an intelligent writer in the *Sydney Herald*, the north-west coast between the parallels of 16° and 21° is composed of low sandy beaches, with no appearance of high land behind them. With these two exceptions the whole of Australia is surrounded by a mountain belt, from 2,000 to 6,000 feet in height, at a distance of 50 to 100 miles from the coast, with collateral spurs or buttresses. From the outer and most precipitous side of this girdle short rivers flow to the sea coast; from the inner and less precipitous face, which in several places declines in successive terraces, different rivers flow, it is supposed, towards some great central basin, or are swallowed up in the burning sands, or evaporated by the intense heat of a tropical atmosphere, increased by the distance of the central parts of Australia from the sea, or possibly these inland streams may be absorbed by immense marshes. But all these suppositions would seem to indicate that this vast island is of recent date compared with other portions of our globe, and that the interior is still little better than a slightly elevated ocean bed, with a mountain crust around it.

Coast Line of Unsettled Parts of Australia.—The information obtainable on this head is fragmentary and imperfect, but I shall endeavour to frame a connected view, so far as is known, of the physical features, commencing with *Cape Capricorn*, on the east coast, in $23^{\circ} 30' 30''$ S. lat. The most remarkable features on the adjacent shore are—Round Hill, 2,000 feet; Mount Larcom, 1,800 feet; and Peaked Hill, which stand out in bold relief against the pure blue of an Australian sky; they are fronted with groups of coral islets connected with the Great Barrier Reef.* *Cape Capricorn* itself has a hump resembling a haycock.

Southward of Port Bowen there are two peaks with an elevation of about 2,000 feet, which form the northern end of a high rocky range. The country surrounding Port Bowen is picturesque, many ranges of hills, both peaked and roundbacked, rise near the coast, and have an elevation in the interior of 2,000 to 3,000 feet.

In consequence of shoal bars there is not an easy entrance for large vessels much further than *Entrance Island*. The country, when visited in February, 1843, appeared dried up; not a drop of fresh water to be found anywhere.† But this may not always be the case. Dr. Leichardt, speaking of the country contiguous to the north-east coast in 1844, assigns reasons for supposing that part of Australia to have been exceedingly dry for a series of years.

About *West Hill* and *Broad Sound* the coast of the main land is formed of a low sandy shore, with a flat country of five or six miles wide, backed by a bold range of lofty flat-topped hills, with here and there a conical peak. *West Hill* rises directly from the sea to the height of a thousand feet. The seaward cliff of *West Hill*, and, in the opinion of Mr. Jukes, the mass of the hill itself, is composed of very fine grained trap or basalt, with small crystals of feldspar only visible with a lens. The rock is split by innumerable joints and veins, crossing at all angles into masses of different shapes.

The *Northumberland Islands* have an elevation from 200 to 400 feet; in one instance of 720 feet. The crests of the western isles are covered with pine trees. The *Percy Islands* are also elevated, wooded, and composed of a trap-like compound with an aspect of serpentine.

* Stokes's Discoveries in H.M.S. *Beagle*, 1837—43.

† Jukes's Voyage of H.M.S. *Fly*, 1842—46.

At *Cape Palmerston* there is a small headland of red quartzose rock, and adjacent there is a cove five or six miles deep by three wide. Near to the harbour are grassy slopes, open woodland, and hills with jungle and lofty trees.

The coast between Broad Sound, in $22^{\circ} 15'$ S. lat., and Whitsunday Passage, in $20^{\circ} 20'$ S. lat., differs in some respects from any part of the coast seen by the officers of *H.M.S. Fly*. A solid range of uniform hills, at a distance of five to ten miles from the coast, bounds a fine undulating tract of country, well watered, covered with abundant close grass, timber of large size and various descriptions, and many small bays and inlets.

Cape Hillsborough is a bold headland, 900 feet high, and very steep all round.

Cumberland Island is a singular mass of rocks, and appears as if made up of angular fragments of compact feldspar cemented together.

At *Port Molle*, at the north-west end of Whitsunday Passage, the shores rise in a steep slope, and in some of the places adjacent to the strait, have an elevation of several hundred feet, covered by magnificent forests, the greater part of which are of the pine species. This timber tree, which resembles the Norfolk Island pine, is found along the east coast from Port Bowen to Cape Melville, but Whitsunday Passage seems to be the favourite locality.

Mount Dryander, on the promontory which terminates Cape Gloucester, is more than 4,500 feet high. There are hills around to the height of 700 to 1,000 feet.

Cape Upstart, so called by captain Cook, consists of a huge mass of granite, about 2,000 feet high, rising abruptly from the water on all sides, and connected with the mainland by a mangrove swamp. It has a singularly rugged and barren aspect, and appears like a vast mass of ruins,—its crests are covered by huge boulders, or blocks of loose rock, with patches of scrubby vegetation. The cape is insulated by a small creek winding round the southern foot of the high land, and connecting the bays on the east and west sides of Cape Upstart. Immense beds of mangrove stretch round the head of Upstart bay, and a wide flat runs for some miles beyond them into the country, over which are seen some bold hills, in separate groups, rising like islands out of the level land.

Captain Blackwood, R.N., crossed a very

pleasant grassy country, towards the hills in the north-west.

Mount Elliott, lying about forty-five miles west and by north from Cape Upstart, is a long level hill, peaked at its northern extremity.

Wickham River, north of Cape Upstart, is approached through heavy breakers, and the opening seen by *H.M.S. Fly* in 1844 was about three miles wide, and had a depth of three and a half fathoms, about 200 yards from the north shore, where the land was an open forest country, with green grass and scattered trees. The south shore seemed a great mangrove swamp, with a spit of sand running out to sea among the breakers. At a distance of seven miles from the inside of the breakers, the reach of the river curved to the west, became shallower, leaving the steep cliff and forest land of the north or left bank, passing over flats of sand and pebbles; beyond this the boat could not proceed. From the top of the river cliffs, forest land was seen stretching into the interior, the trees close together, and the underwood thick.

The land round *Cape Bowling Green* is scarcely above the level of the sea, and is probably the delta of a large river. Palm islands are lofty, wooded, and have a picturesque appearance, especially *Magnetic Island*, so named by Cook. The mountain range seen from Cape Bowling Green is at least thirty miles in the rear.

Cape Cleveland is, like Cape Upstart, abrupt and broken, but more woody, having fine pines in many of its gullies. At this point the cordillera of Eastern Australia tower to a considerable elevation close to the coast. From Cape Grafton to Cape Tribulation precipitous hills, bordered by low land, form the coast line; the latter-named cape consists of a lofty group with several peaks, the highest of which, in the shape of a finger, is visible from the sea at a distance of twenty leagues.

Gould Island Peak, in Rockingham Bay, is nearly 1,400 feet above the sea; about five miles to the south-west of it is *Mount Hinchinbrook*, 2,500 feet high. It is a broken mass of hills, covered with ragged knolls, and sharp inaccessible pinnacles, furrowed by deep and precipitous ravines. On the mainland is an unbroken range of high land, none of less than 2,000 feet elevation, stretching along the shore to the southward, and after sweeping round Rockingham bay it rises and spreads to the northward into

still loftier and more broken mountainous elevations. The summit of this range, near Rockingham bay, is very level, but there are many projecting buttresses and ridges on its seaward slope, which is everywhere very steep, and apparently furrowed by many gullies and water-courses.

Endeavour River, where captain Cook careened in 1770, after grinding the bottom of H.M.S. *Resolution* for twenty-three hours on Endeavour reef, has for its external aspect bare and rocky hills of moderate height, with their seaward slopes almost destitute of vegetation. On the north shore is a line of sand dunes beneath the higher hills; on the south shore is a hill of moderate elevation, tolerably clothed with small eucalypti, and sloping down to a grassy flat, fronted by a line of mangroves. Beyond these the land is low for some miles, and then backed by tabular flat-topped hills a few hundred feet high, and of a different aspect to those usually seen on the coast.

Cape Bedford is one of the most remarkable features on this coast, being a bluff detached piece of table land, surmounted by a singular low line of cliffs, which forcibly reminded captain Stokes of the lava-capped hills on the river Santa Cruz, in East Patagonia.

Cape Flattery is a conspicuous headland, consisting of two peaks, with a slope between them.

Lizard Island, in $14^{\circ} 40'$ S. lat., has a bold aspect of nearly 1,200 feet elevation, composed entirely of granite, and nearly destitute of wood; on the westward is a grassy well watered plain, with some smaller ridges. The appearance of the coast now changes from moderately high conical-shaped hills to table-land ranges of 500 to 600 feet, trending about south-west and by west.

Cape Melville, which stands out like a shoulder for more than forty miles beyond the coast line, is composed of piles of reddish coloured stones, scattered about in the utmost confusion, and in every possible direction, over a high ridge. There are several dangerous islands and rocks off this headland.

Princess Charlotte Bay is large and free from shoals; at the head of the bay is a remarkable level-topped hill, conspicuous from the low nature of the surrounding country.

Claremont Islands are a low rocky group, surrounded by coral reefs.

Cape Direction has a moderately increasing height, compared with the coast immediately to the southward. A round hill, in 13° S., has an altitude of 1,250 feet.

Restoration Island [visited by captain Bligh in the *Bounty* launch, in 1789,] in $12^{\circ} 37'$ S., is a rocky lump, terminating in a granitic peak, 360 feet high. It was so named by Bligh, from his having seen it upon the anniversary of the recal of Charles II. to the throne of England.

Fair Cape, and thence to the northward, presents a series of undulating hills from 500 to 700 feet in length. The monotonous aspect is broken by *Pudding-pan hill*, so named by Bligh from its resemblance to a sailor's pudding-pan. It has a height of 354 feet.

Cape York, the most northern point of Australia, has a small rocky island not quite 300 feet high, steep, and nearly conical, separated from the main land by a narrow boat passage. Immediately south of Cape York Island the land rises into a somewhat sharply-peaked hill, with an elevation of 420 feet. It is called Bremer Peak. To the eastward is a shallow bay, with a flat sandy beach, backed by a belt of jungle, then a small woodland, and behind rocky hills 300 feet in height, one ridge of which comes down to the beach. Excellent fresh water is everywhere procurable by digging, and this position seems well adapted for a British settlement, as it would, in fact, form a "corner shop" for all vessels passing to the eastward.

Endeavour Strait, between Cape York and Cook's islet, is a safe harbour for shipping, except in one or two places near the shore. The west entrance is encumbered by large sand banks, through which, however, there is a safe passage, with never less than four fathoms water. The islands which stretch to the northward from Cape York, across Torres Straits to New Guinea, are all rocky, steep, many 500 feet high, and composed, like the rocks of the adjacent main land, of porphyry, sienite, and siliceous schist. Mr. Jukes considers them merely the submarine prolongation of the great mountain chain of the east coast of Australia, and which passes from New South Wales to the southward, through Bass' Straits to Van Diemen's Land. The loftiest and most massive portion is between Cape Upstart and Cape Melville, whence it gradually decreases to Cape York, where the hills are 500 to 600 feet high.

Possession Islands in the mouth of En-

deavour Strait, and the larger islands to the northward, are all rocky and barren, with here and there small fertile and cultivable spots, and by no means deficient in beauty, being of varied and undulating surface, with lofty peaks and ridges, and sheltered valleys, but they seem to be mostly destitute of water except in the rainy season; their inhabitants are few and scattered, and appear to be peaceable and well-disposed.

Booby Island, much frequented by boobies, pigeons, and quails, called also the "Post Office," forms the western limit of all the dangerous part of Torres Straits in the ordinary track of vessels, and for half the year it is a constant place of resort for vessels proceeding to India and China from Australia. It is a mere rock, about fifty feet high and a quarter of a mile in diameter, the summit consisting of bare porphyry.

A shed has been erected, beneath which is a large chest containing a blank book with pens and ink, a bag of beef and some biscuit for any boat's crew escaping from a wreck. Letters are left here by ships, and notices are entered in the book announcing their safe arrival. (A similar practice prevails at the Galipago Islands in the Pacific among the whalers.) All the ships which have recorded their passage at the "Post Office" appear to have entered the Barrier Reef between the parallels of $11^{\circ} 30'$ and $12^{\circ} 10'$, generally about $11^{\circ} 50'$, reaching Sir Charles Hardy's Island the same day. They all note a strong northerly current outside the reef, in some instances of nearly three miles an hour. The time occupied in making the passage from Sydney by the outer route was from fourteen to twenty days, which was shorter than the route between the reefs and the main land, though attended with much greater risks. In traversing the "inner route," vessels are obliged to anchor every night, which is a severe labour for the small crew of a merchant ship.

The *Barrier Reefs* are a peculiar and important feature in the N. and N.E. coast of Australia; the great coral reefs form a vast submarine buttress which skirt the shore, and in the instance of the "*Great Barrier Reef*" extend from Breaksea Spit in $24^{\circ} 30'$ S. lat. and $153^{\circ} 20'$ E. long., to Bristow Island on the coast of New Guinea, in $9^{\circ} 15'$ S. lat. and $143^{\circ} 20'$ E. long., a distance in a straight line of about 1,100 geographical, or 1,260 statute miles—the longest known coral reef in the world. This reef stretches along the Australian coast at a mean distance of

thirty miles from the land; the outer edge being in some places not more than ten or fifteen, in others 100 miles distant. Outside the barrier there are numerous detached reefs, of greater or less magnitude, extending from Torres Strait to New Caledonia; but the distance of these isolated reefs from the Great Barrier, is from sixty to one hundred miles. There are therefore two passages for vessels sailing from Sydney by the N.E. route to Singapore, China or India, *via* Torres straits—*first*, the INNER passage, about thirty miles wide, between the main land and the Great Barrier; and *second*, the OUTER, sixty to one hundred miles wide, between the Great Barrier and the detached reefs and coral islets, which are so numerous that Flinders gave to Torres Straits the appellation of the coral sea. Mr. Jukes, the naturalist, on board H.M.S. *Fly*, captain Blackwood, recently engaged in laying down beacons, by which vessels proceeding to the eastward through Torres Straits might be enabled safely to enter the principal openings in the Great Barrier in order to pass between Australia and New Guinea, has given in an interesting "Narrative of the surveying voyage of H.M.S. *Fly*," useful details respecting these reefs, on the authority of Mr. Evans, master of H.M.S. *Fly*. It appears that the Great Barrier reef is composed of different formations of coral, viz.:—the (1) *linear*, (2) *detached*, circular, or oval groups. The linear rise from great depths, have a breadth varying from a quarter of a mile to a mile; are in length from three to fifteen miles; have on the outer side an unfathomed depth, and on the inner, soundings of from ten to twenty fathoms. The detached reefs are generally circular or oval, flat at the surface or near the level of low water, the edge gradually rounded off, sloping down into deep water, sometimes to 200 fathoms, and at Wreck Bay to 285 fathoms without soundings. The centre consists generally of dead coral branches, among dazzling white sand; the living corals are more to the edge of the reef. The line of reefs runs N. and N. by E., whilst the Australian coast trends to N.N.W.; the distance from the land is gradually increased, and at Cape York in $11^{\circ} 40'$ S. lat. the passage is eighty to ninety miles wide; it is, however, supposed there are several inner reefs, and as the coral polypi are continually sending up new banks, this passage, even with its smooth water, must always be hazardous. On the authority of captain Flin-

ders, it is stated that the Great Barrier reef towards the south, is ninety to one hundred miles from the shore, with which it has no cross communication. The breadth of the reef towards the south is forty or fifty miles; it becomes narrower towards the north. At Cape Tribulation, in about 16° S. lat., the Barrier Reef closes in with the shore. For about 350 miles from the southern opening off Breaksea Spit, there is no navigable passage through the barrier that can be safely trusted; there are some crooked intricate openings. The interior passage between the reef and the land is remarkably clear from dangers, except in the vicinity of the numerous little islands with which it is dotted; the depth of water at a distance from these islands is very uniform. When the wind is from the east, the sea breaks upon the outer margin of the reef with terrific violence, but the inner waters are perfectly tranquil.

Wreck Reef, upon which captain Flinders was wrecked with H.M.S. *Porpoise* and *Cato*, in 1803, is 300 miles to the north-west of Breaksea-spit, and it was then an incipient island, in length 150 fathoms, by fifty in breadth, with a general elevation of three or four feet above ordinary high water. A few diminutive salt-water plants resisted the saline spray; the eggs of sea-fowl were observed; and probably now there are coconut or other trees, whose nuts or roots have been drifted there by the ocean.

On a reef may be seen coral growing beneath the surface of the clear water, in the shape of wheat sheaves, mushrooms, stag's horns, cabbages, and a variety of other forms, with vivid tints of every shade betwixt green, purple, brown, and white; equalling, says Flinders, in beauty, and excelling in grandeur the most favourite parterre of the curious florist.

The manner in which a coral reef is formed is very singular. The animalcules which produce the coral, commence with singular instinct to make their structure perpendicular; when they cease to live, the whole mass becomes agglutinated, and the interstices are gradually filled up by sand and broken pieces of coral washed up from the sea, until a mass of rock is formed. Another race of animalcules then proceed to build on this foundation. As each successive generation perishes, another takes its place, to increase the elevation of their habitation, and the coral wall, where the winds are pretty constant, first reaches the

surface of the ocean to *windward*: so that the insect may have shelter to send off numerous colonies to *leeward*, protected from the wind and surf. Hence the greatest depth of water and the highest part of a reef is always to windward, and the wondrous structure thus raised has, on the one side, a nearly perpendicular elevation of 200 to 300 fathoms. When the reef is raised above high-water mark, the coral insect ceases to exist. The different corals, in a dead state, are converted into a solid mass of a dull white colour; and some lumps, called "negro heads," higher than the surrounding mass, become blackened by the weather. Sponges, sea-eggs (*echinæ*), enormous cockles (*chamagigas*), and "cucumbers," (a large slug called *holothuria*, by the French *bêche de mer*, by the Chinese *trepang*), and other substances soon fill the crevices of the reef: sand accumulates; sea-birds make the bank a place of incubation; soil is formed; the seeds of shrubs and trees, which constitute the food of some birds, are deposited on the island, which soon becomes a mass of living verdure.

The beacon erected by captain Blackwood, of H.M.S. *Fly*, on Raines islet, as a mark for the best passage through the outer line of reefs, is a circular stone tower, forty feet high, and thirty feet in diameter at the base, where the walls are five feet thick. Internally it is divided into three stories, accessible by ladders. The roof is a dome-shaped frame of wood, covered by painted canvas. The summit is raised seventy feet above low water-mark. There is a large tank adjacent; and a garden has been planted with cocoa-nuts, maize, pumpkins, &c.

Torres Strait is one mass of islands, reefs, and shoals, with six to twelve fathoms water at the narrowest part, and nowhere deep water, so that with clear weather, and the sun vertical or in the rear, a vessel may be safely navigated. The beautiful light of the tropics is increased by the reflection of the nearly colourless bottom, covered with various molluscæ, some perfectly transparent, others of various hues. Fish of all sizes, shapes, and colours are seen; the voracious shark eagerly pursuing his prey, the turtle rolling along in his unwieldy shell, and sea-snakes of large dimensions and of glowing lustre may be traced in their rapid gliding movements as clearly as if they were flying in the air.

The *Gulf of Carpentaria* extends inland 600 miles, and has a breadth of 400 miles

its coast line measures about 900 miles, including the bays and windings. The shores are almost invariably low, and the water everywhere shallow towards the edge, with a bottom of blue mud or sand. The greatest depth of soundings in crossing the southern part of the gulf from coast to coast, is fifteen fathoms; fine, dark, sandy, mud bottom. The lee shores are covered with mangroves, behind which water is often seen. Trees (palms of considerable height) are found on some elevated places, but barrenness is the general character of the surface. Flinders says that for the space of 600 miles, between Endeavour Strait and a range of hills on the main land, west of Wellesley Island, at the bottom of the gulf, no portion of the coast is higher than the mast-head of a ship; some part of Wellesley Island is more elevated than that of the main, but the highest does not rise 150 feet. The general appearance of the head of the gulf is that of a low mangrove shore, ten to thirty feet high, over which the interior is not visible from the offing. Nearly 200 miles of the south-eastern coast were minutely examined by the surveying officers of H.M.S. *Beagle*; twenty-six inlets were discovered, of which two proved to be rivers, whilst three more were nearly as promising.

Van Diemen's River, on the south-east coast of the gulf, is considered by Stokes to be an inlet rather than a river, but its waters appear to be less salt at low tide. The bar, three-quarters of a mile off the mouth of the inlet, has only two feet on it at low water, but the first reaches of the inlet or river have a depth of one and a half to three fathoms, and a width of 200 to 300 yards; the stream then becomes much narrower, and so tortuous, that its windings of twenty-seven miles only brought the explorers to eight miles, in a 60° S.E. direction, from the entrance; then dividing, one branch trends south, and the other east, each being about fifteen yards wide and two feet deep; the water was quite salt, and the mangroves were growing on either side at the point where the examination was abandoned. At the mouth of the river the coast bears the same low, sandy, or mangrove-clad appearance noticeable in other portions of the eastern coast of the Gulf of Carpentaria; the highest elevation seen was six miles from the entrance, where the banks attained an elevation of ten feet, the rise being marked by a growth of eucalypti of tolerable size; elsewhere the banks rose scarcely three feet

above high-water level, and were generally fringed with mangroves, behind which, in many instances, extensive clear flats were observed, reaching occasionally from the sides of the inlet toward the upper parts, and when seen in June, they were the resort of large flights of the bronze-winged pigeon.

Flinder's River, on the south shore of the Gulf, was discovered and explored by captain Stokes, to the extent of thirty miles to 17° 51' S. lat., in a general S. by E. $\frac{1}{2}$ E. direction from the entrance. It separated into two branches, one taking an easterly, and the other a southerly direction. After passing the sea-bank, the depth was one fathom; further inland, the river expands into a beautiful sheet of water, a quarter of a mile in width, but only three feet in depth, here and there diversified by low islets, clad with emerald verdure, with, on the other hand, green and grassy cliffs, sloping almost imperceptibly to the stream; anon the eastern bank becomes steep, overhanging and clothed with a mass of luxuriant creepers, whilst the opposite side presents a low woody patch, partly immersed by the glassy, lake-like waters of the river. At the bifurcation of the stream, a rocky formation of a red ferruginous character was observed. The country appeared to abound in rose-coloured cockatoos, whistling ducks, and vampyres.

The Albert River, discovered by the surveyors of H.M.S. *Beagle*, also disembogues in the southern part of the Gulf, in 17° 35' 10" S. lat., and 7° 35' 50" E. of Port Essington. It has a bar with thirteen and seventeen feet of water, and is navigable for vessels of a draught suited to the bar for thirteen miles, and within five of where the saltiness of the stream ceases. The opening of the river for three miles is almost straight, in a south by west direction, with a width of 200 yards, and a depth of two and-a-half to five fathoms; the banks fringed with mangroves. Eight miles from the mouth are two islands, and two others four miles further up, where the breadth is nearly a mile, and the depth two fathoms. The river winds tortuously to the south and east, through a rising country, with occasional grassy plains, a soil of a light brown colour, void of sand, of considerable depth, and thickly wooded. Further inland the country becomes perceptibly higher,—the scenery extremely picturesque, tall palm trees and bamboos, fifty feet high, rise from the thick foliage on the lower slope of the banks; and at Hope Reach, a magnificent sheet of water

is bounded on either bank by extensive grassy plains, dotted with 'woodland isles' springing from a rich light-coloured mould. The river now becomes a shallow, rapid stream, and in $17^{\circ} 58' 30''$ S. lat., $129^{\circ} 25'$ E. long., the country is most inviting; the line of verdure pointing to the south over the "Plains of Promise."

Bountiful Islands form the eastern part of the Wellesley group on the south-west coast of the Carpentaria Gulf. They were so named by Flinders on account of the plentiful supply of turtle found there. He mentions having obtained from one turtle 1,940 eggs. Near the islands was noticed by Stokes, a "shrubby, thick, compact sort of sea-weed," also seen on the parts of the north-west coast frequented by the turtle, and which is probably their food. The islands are one mile and-a-half from each other; the larger and more northerly is two miles and-a-half long by three-quarters wide, with cliffs on the south-east side of sand and ironstone formation, the latter predominating.

Sweers Island, south of the Bountiful Islands, bounded by low dark cliffs on the north-east, is very woody, and was found to be literally covered with locusts.

Bentinck Island has an extent of ten miles either way, is slightly elevated, thickly wooded, and abounds in several sorts of winged game.

Point Inscription (so called from a tree being found by Stokes, with a notice of Flinders' visit in the *Investigator* forty years previous cut thereon) is in $17^{\circ} 6' 50''$ and $7^{\circ} 28' 30''$ E. of Port Essington.

The west shore of the Gulf of Carpentaria is somewhat higher than the east shore, and from Limmen's Bight to the latitude of Groote Eyland, is lined by a range of low hills. Proceeding to the northward the coast becomes irregular and broken, consisting chiefly of primitive rocks, the upper part of the hills being composed of a reddish sandstone. The general range of the coast, from Limmen's Bight to Cape Arnhem, is from south-west to north-east; and three conspicuous islands at the north-west entrance of the Gulf of Carpentaria have the same general direction. Low land extends westward to *Castlereagh Bay* and *Goulburn's Island*. The *Liverpool River*, on this part of the coast, is four miles wide at its mouth, with a tortuous and rather shallow stream, which has been traced inland to about forty miles from the coast, through a country

whose general elevation does not exceed more than three feet above high-water mark; the banks low, muddy, and thickly wooded. West of Goulburn Island the coast is more broken and irregular, but the elevation is inconsiderable, *Coburg Peninsula* not being more than 150 feet above the sea, and the hills about 300 to 400 feet in the background between the Liverpool and Alligator rivers. Some of them are remarkable for their linear and nearly horizontal outline, the tops resembling that of a roof or a haystack, the transverse section being angular, and the horizontal top an edge. The Cobourg Peninsula projects N.N.W. from the main land of Australia for a distance of fifty miles, the greatest breadth being fifteen miles, and the narrowest, five miles.

Port Essington, in $11^{\circ} 6'$ S. lat., and $132^{\circ} 12'$ E. long., is seven miles wide between Point Smith on the east side, and Vashon head on the west. The port extends about eighteen miles in a S.S.E. $\frac{1}{2}$ E. direction, with a depth of twelve to five fathoms. At the southern end it forms three spacious and secure harbours, each of them extending inwards three miles, with a depth of two and five fathom soundings; mud and sand. The shores of Port Essington consist of little bays and sandy beaches, alternating with bold cliffs and steep clay-banks; inland, a continuous forest of trees, occasionally relieved by undulating or round hills, with an elevation of 100 to 200 feet above the sea. At Port Essington, the sides of the harbour are formed by several low rocky headlands, and cliffs of red or white sandstone and ironstone, twenty to thirty feet high: between the cliffs are shallow coves, backed by mangrove swamps, and behind a low country, with a sombre wood of low eucalyptic trees. *Victoria* (a recently-formed British station) consists of a few wooden houses, on a flat piece of land forty or fifty feet above the level of the sea, on the west side of the harbour. The soil in and around the settlement is poor, and except in the swamps and lowest hollows, composed of the detritus of sand and ironstone, without any apparent mixture of vegetable soil. Large tracts were seen with scarcely a blade of grass, and little or no undergrowth, and the forest, or "bush," looked like a badly-kept gravel-walk, on which a few small trees were growing. When visited by H.M.S. *Fly*, in August, 1843, there was not grass enough, within a mile of the settlement, to feed a single cow. The heat at Port

Essington is very great. In January, 1845, the thermometer stood often as high as 96° at eight a.m., and 100° and upwards at noon. For four years after the settlement was established, captain M'Arthur, and the marines stationed there found it healthy; but the rainy season, which commenced so early as October, 1842, and lasted to April, 1843, is supposed to have caused great sickness, which has continued, with more or less severity, ever since; and the detachment of fifty marines have experienced considerable diminution of numbers, and been several times relieved. By the last accounts at the period at which I am now writing (January, 1850), there were only two or three marines fit for duty. The attempted formation of a settlement at Port Essington has been unsuccessful. Mr. Jukes, who has visited many of the colonies, and whose unprejudiced mind entitle his remarks to considerable weight, visited Port Essington four times, at different periods of the year, and thus strongly expresses his opinion, which he supports by various arguments:—"I believe it to be utterly worthless as a colony, or as an agricultural or commercial possession." It is not adapted for a harbour of refuge, as it is 600 miles from the extreme limits of the sea, where wrecks are most likely to occur; namely, the coral sea and the eastern side of Torres Straits. Low land and shoals, to the east of the harbour, render it difficult to find, and dangerous to approach; and the settlement of *Victoria*, sixteen miles up the harbour, would, in addition to the deviation from the ordinary route of the fair or trade wind, ensure any passing vessel a detention of at least two days to look in there. Added to this, the climate is decidedly unhealthy; many valuable lives have been lost, and the government have consequently resolved to withdraw the men and officers stationed at Port Essington, which is now being done.

Raffles Bay, in $11^{\circ} 12' S.$ lat., $132^{\circ} 26' E.$ long., thirteen miles east of Port Essington, is of a circular form, with a diameter of three miles, and shallow depth, varying from three to four fathoms. The coast about *Port Raffles* is exceedingly low, and has been compared to the coast of Orissa in Bengal, and also to that of Demerara; there are few patches of good soil, and it would seem ill adapted for an agricultural or pastoral settlement. The British colony, established here in 1827, was abandoned in 1829, on account of its unhealthiness, the hostility of

the natives, and the disappointment occasioned by the Malays not coming on fishing expeditions as was expected.

Melville Island, separated from the north coast of Australia by *Clarence Strait*, which is about fifteen miles wide, lies between the parallels of $11^{\circ} 8'$ and $11^{\circ} 56'$ S. lat., and the meridians of $130^{\circ} 30'$ and $131^{\circ} 34'$ E. long., five degrees west of the Gulf of Carpentaria, and distant 330 miles from the island of Timor in the Eastern Archipelago. The extreme length from *Cape Van Diemen* to *Cape Keith* is seventy-five miles; the extreme breadth from *Cape Radford* on the north to *Cape Gambier* on the south is thirty-seven miles. The surface of the island is low and gently undulating, averaging from twenty to seventy feet above the sea, except on the south coast, where some peaks have an altitude of 250 feet. The north line of coast is low, and lined with mangroves; the east, west, and south sides more elevated, sometimes forming abrupt cliffs or clay banks. The interior consists of almost impenetrable mangrove swamps and close forests, the largest timber measuring sixty feet of stem, with a diameter of three feet. The soil, so far as ascertained, is poor. In 1824, a British settlement was formed on the island in *Apsley Strait*, but it was abandoned in 1829.

Bathurst Island, separated from Melville Island by Apsley Strait, is of a triangular shape, each side measuring about forty miles. It is similar in appearance and production to its neighbouring island. The approach to Apsley Strait is intricate, beset with shoals, and notwithstanding an excellent survey made by major Campbell, of Her Majesty's 57th regiment, formerly commandant of Melville Island, too dangerous for general navigation. Apsley Strait, and the creeks and rivers on the north coast of Australia, abound with alligators of fourteen to twenty feet in length, and sea and land snakes two to twelve feet long.

Adelaide River, seventy miles from Port Essington, falls into *Adam's Bay*. *Clarence Strait* has a depth of four fathoms where it empties itself into the bay. Captains Wickham and Stokes, R.N., traced the river in a southerly direction nearly eighty miles, and found it navigable for fifty miles for a vessel of 400 tons. The windings in some places are in the shape of the letter S. At that distance in $12^{\circ} 57' S.$ lat., $131^{\circ} 19' E.$ long., the stream became very narrow, and divided into two branches, one proceeding in a southerly and the other in an easterly direc-

tion. For thirty miles of the upper course of the Adelaide the water was fresh, and the banks, except at the point of separation, not more than five feet above the level of the river. A mangrove swamp occupied the country for fifteen miles towards the mouth, but beyond there a fine prairie was observed, with a soil of light-coloured mould, dotted here and there with "islands of timber," and on the banks a thick jungle of bamboo, some of which attained the extraordinary height of sixty to eighty feet.

Port Darwin, in $12^{\circ} 27' 45''$ S. lat., $1^{\circ} 19' 40''$ E. of Port Essington, has an entrance between white cliffy projections, three miles distant from each other; although of considerable size, it has much shoal water, especially on the west side. The shore is low and sandy, sprinkled with brush-wood, and has singular-looking detached peaks in the background.

Point Pearce, Treachery Bay, where captain Stokes was speared and nearly killed by the natives, is in $14^{\circ} 25' 50''$ N. lat., $2^{\circ} 49'$ W. of Port Essington. It has wooded cliffs of a reddish hue, from the quantity of iron in the rocks.

The Victoria River, one of the largest streams in Australia communicating with the ocean, was discovered by captains Wickham and Stokes, in September, 1839; and explored, with great perseverance, by the latter-named officer. The mouth of the river is in $14^{\circ} 20'$ S. lat., $129^{\circ} 21'$ E. long., between Turtle and Pearce Points, in Queen's Channel, which is there twenty-six miles wide.* The river was traced to a distance of 140 miles from the sea; for the first thirty miles of the upward course its character undergoes little change; the left side continues bold, with the exception of a few extensive flats sometimes overflowed, and a remarkable rocky elevation about twenty-five miles from the mouth, to which the name of *the Fort* was given, on account of its bastion-like appearance (subsequently called Table Hill in the chart). The right shore continues low, studded with mangroves, and subject to overflows. At thirty-five miles from the embouche, the scenery entirely changes; the river runs between a precipitous rocky range of compact sandstone, rising to a height of 700 to 800 feet, and is here sometimes two miles wide, having in several places a depth of twenty fathoms, and rushing with a velocity of six miles an

hour. It continues a rapid stream through this defile for about thirty miles, and is subsequently found flowing slowly across a rich alluvial plain fifteen miles in width. Beyond this plain the Victoria passes through another but less elevated gorge, viz., 400 to 500 feet, whose elevation increases as the river is ascended, and the width, depth, and velocity of the stream decreases. In proportion as the high land or banks approached the channel on one shore, in the same degree it was found to recede from the opposite side; and supposing the whole valley to have been at one time filled with water, the breadth above Reach Hopeless and at Mount Regret must have been from three to five miles. When captain Stokes reluctantly quitted the further exploration for want of provisions, and from the illness of one of his men, with whom it was necessary to return to H.M.S. *Beagle*, he could perceive, "far, far away, the green and glistening valleys through which it wandered:" he felt assured "of the constant presence of a large body of water," and convinced that the Victoria "will afford a certain pathway far into the centre of Australia." The coast to the E.N.E. of the mouth of the Victoria consists of vast ranges strewn over with huge blocks of sandstone; chasms, ravines, and thirsty stone valleys yawn on every side; and all around is broken, rugged, and arid, as if the curse of sterility had fallen on the land, presenting a strong contrast with the country seen up the Victoria river.

Cambridge Gulf, a swampy arm of the sea, extends inland eighty miles in a southerly direction. In its vicinity, the general flatness of the country to the northward and eastward, as far as Cape Wessil, a distance of 600 miles, ceases, and is succeeded by irregular ranges of detached sandstone hills, which rise abruptly from extensive plains of low and level land. From Cape Londonderry to Cape Voltaire the country is of moderate elevation, with mountains in the back-ground. The coast has a direction from north-east to south-west, with numerous indentations, and the adjoining sea is studded with sandstone islands. York Sound, a spacious bay, is bounded by precipitous rocks from 100 to 200 feet in height. It receives two rivers, so far as known, of small dimensions. One of the largest inlets on the north-west coast, termed *Prince Regent's River*, is about thirty miles to the south-west of York Sound. The course is

* *Discoveries in Australia*; by Captain Stokes, R.N.; vol. 2, p. 113.

almost rectilinear for fifty miles in a south-east direction; its rapid passage over stone blocks has prevented its further exploration: but at that distance from the sea it is 250 yards wide, with abrupt banks of reddish sandstone, 200 to 400 feet high. *St. George's Basin*, in Prince Regent's River, is a noble sheet of water, ten or twelve miles across: on its south side deep inlets run up into a low marshy country leading to fertile districts; on the north bank lofty mountains, crowned with castellated summits, rear their sterile heads over the broad waters. Captain Grey, in his very interesting *Journals of two Expeditions of Discovery in North-West and West Australia*, says, that the most remarkable geographical feature in North-West Australia is a high range of mountains, running N.N.E. and S.S.W., (named by him Stephen's range,) from which several branches are thrown off:—1st. One between Roe's River on the north, and Prince Regent's River on the south; 2nd. Macdonald's range, that throws off streams to Prince Regent's River on the north, and to Glenelg River on the south; 3rd. Whateley's range, which gives forth streams to Glenelg River on the north, and to the low country, behind Collier's Bay and Dampier's Land on the south. These branch ranges, as well as the primary one, are composed of ancient sandstone, deposited in nearly horizontal strata, or of basaltic rocks, which are only visible in certain places, and are fully developed in that part of Stephen's range which lies behind Collier Bay, and in the low ground near Glenelg River. The extent of Stephen's range captain Grey was not able to ascertain; but it contains within it the sources of Roe's River, Prince Regent's, and Glenelg rivers, most probably the Fitzroy, those that run into Cambridge Gulf, and perhaps others that have their embouchures between Cambridge and Admiralty Gulfs. Governor Grey does not consider this range very elevated; he estimated the highest parts of the table land of Macdonald's range at 1,400 feet above the sea, and the altitude of the farthest point reached of Stephen's range at 2,500 to 3,000 feet. The rivers on the north-west coast resemble those of the south-east part of Australia. They rise at no great distance from the sea; near their sources are mountain torrents; and, in the low lands, streams, with slow currents, flow through extensive and fertile valleys or plains, subject to considerable inundations. The valleys of the north-west coast are of

two descriptions—those which are almost ravines, enclosed on either side by inaccessible cliffs, or valleys of great width, bordered by fertile and often extensive plains, which occur where the basaltic rocks are developed. One valley in which governor Grey and his party encamped, had a main width of only 147 feet; and, half a mile from the sea, the rocky precipitous cliffs rose 138 feet. The sandstone formation is intersected, in all directions, by valleys of this kind, which are seldom more than two or three miles apart, while the top of the range between them is a table land, divided by lateral valleys, and gently rising towards the interior. Seawards they all terminate in salt-water creeks, having the same narrow, rocky, and precipitous character. The richest land is found upon the valleys of the second class, where the streams flow through wide plains, and have their margins thinly wooded. Fine vegetable mould was seen by captain Grey, ten or twelve feet in thickness.

The Gascoyne River is apparently one immense delta of alluvial soil covered with gently sloping grassy elevations, which can scarcely be called hills, and in the valleys between them are many fresh water lagoons, which rest upon a clay soil. The country is lightly timbered, and well adapted for agricultural or pastoral purposes, but especially for the growth of cotton and sugar.

Further information relative to the north-west coast is very imperfect.

The shore in the neighbourhood of *Hanover Bay* is formed of enormous granite boulders, which render it hardly accessible except at high water. A red sandstone platform is abruptly intersected by singular looking valleys; the precipitous cliffs at first approach each other, and then recede inland in a southerly direction. It was from one of these valleys that captain Grey met so many obstacles in his attempt to penetrate the interior. Hanover Bay is a fine harbour, but not so easy of access from seaward as the contiguous haven of *Port George the Fourth*; but both afford safe anchorage, abundance of fresh water, plenty of fuel, and a fine beach for the seine. Fish, however, are scarce on the north-west coast. The numerous islands and reefs which skirt the shore, greatly diminish the value of these fine harbours.

Red Island, a good guide to the entrance to Hanover Bay or Port George the Fourth, is small, rocky, of no great elevation, with precipitous sides and a clump of trees in the centre. The coast off *Entrance Island* (Port

George the Fourth) is arid and barren, with a line of lofty cliffs occasionally broken by sandy beaches, and a back-ground of rocky sandstone hills very thinly wooded. Generally speaking, the north-west coast is well watered, and although the country around Hanover Bay is very rocky, it has some rich and beautiful vallies.

Doubtful Bay, in $16^{\circ} 4' S.$ lat., has a table land, of sandstone formation, 900 feet above the waters of the bay. The prospect from the summit is cheerless; similar ranges of less height meet the eye in every direction branching towards the interior; those overlooking the eastern shore of the bay are from 600 to 700 feet high. Captain Stokes doubts that any land, as estimated by captain Grey, of two to three thousand feet high, exists within thirty miles of the height on which he stood. Captain King mentions hills of from three to four hundred feet high, at a distance of fifteen miles. It is uncertain whether this bay receives the waters of any river. Mr. Helpman, who explored the south shore of the bay, ascended a high hill, and "feasted his eyes on a most luxuriant well watered country," bearing E.S.E. about eight miles, lying at the eastern foot of a remarkable peak, visible from Port George the Fourth. To the north-east are the *Macdonald range of hills*, which are estimated by captain Grey at 1,400 feet high; Mr. Helpman, however, says they are "apparently of no great elevation." Part of this rich land stretches to within five miles of the south-east part of *Brecknock Harbour*, which is six miles deep, extends gradually from a width of one and three-quarter miles at the entrance, to five at the head, and has a depth of water varying from five to seven fathoms, with a soft muddy bottom. Rocks of transition origin were met with in this neighbourhood, leading to the inference that the soil is of better quality than that formed by the decomposition of sandstone of recent formation. Captain Stokes found, on landing in the neighbourhood at mid-day, "the air quite perfumed with the fragrance of different gums."

The Montgomery Islands (so called by captain King, after the zealous and enterprising surgeon of his ship, who here received a spear wound from the natives, which nearly proved fatal) consist of six small rocky islets, resting on an extensive coral flat; the eastern and largest is seventy feet high, in $15^{\circ} 49' S.$ lat. They form good landmarks for the entrance to *Collier's Bay* (distant eighty

miles from Port George the Fourth), which is twenty miles wide at the commencement, and narrows to six near the head of the bay, fifteen miles from *Eagle Point* in $16^{\circ} 10' S.$ lat. The eastern shore has a south and a south by west direction, formed of shallow bights, flanked by hills of moderate elevation. The western shore runs in a north-west by west direction, has a straight rocky coast, over which a range of barren heights rise abruptly.

King's Sound is a deep inlet on its eastern shore; the face of the country is intersected by deep ravines, and covered with huge blocks of coarse sandstone. From the top of one of the highest hills, captain Stokes reckoned more than eighty islands in this portion of the adjacent archipelago. He crossed two deep bays in the sound—the first three and the second four and a half miles wide—both affording good anchorage, but inaccessible from the barrier reefs and islets across their mouths. These bays and the ranges of adjoining hills trended E.S.E. At a distance of seventeen miles in a N.N.E. direction from the ship in $16^{\circ} 24' 30'' S.$ lat., captain Stokes found the same huge masses of rock, and from the summit of one of them observed yet more numerous islands on the coast, which is indented with bays two to five miles in width, containing long narrow islands invariably trending in an E.S.E. direction. The bays generally subsided in a S.S.W. direction. The scenery at *Print Usborne*, in King's Sound, is very wild; on the north side of the Sound, distant twenty-one miles is *Point Cunningham* and *Carlisle Head*, which appear like two high square-looking islands. The eastern shore of King's Sound, at forty miles from Port Usborne in a direct line, and seventy by the winding course of the main land, forms eight bays, varying in depth three to eight miles, and in width two to five: their general trend is E.S.E. Many islets skirt their shores, and almost more than can be counted fill their mouths.

The Fitzroy River, which disembogues into King's Sound, was traced by captains Wickham and Stokes for ninety miles; in their opinion, it offers a means of access to the interior, by which future explorers may further improve our geographical knowledge of this part of Australia. The country near the embouche of the river is one vast unbroken level, covered with strong, wiry grass, and intersected by numerous water-courses. The general direction of the Fitzroy is south;

at a few miles from the coast the width suddenly contracts from three miles to one; the banks low and covered with a coarse grass. Further south low grassy islets extend across the river, and leave only confined and shallow channels. Passing these islets at a distance of nearly thirty miles from the sea, the stream again widens to 400 or 500 yards, with a depth of twelve feet at low water. The country then begins to improve; the eastern bank becomes thickly wooded, and subsequently the western is seen clothed with verdure. The course of the river now becomes very tortuous; sometimes in a S.W. by W. direction, then to S.E., round to W.N.W.; next three reaches trending S.S.W., S.W., and S., from a mile to half a mile in length, the depth of the stream varying from one to fourteen feet; width from three to five hundred yards. In the deep reaches were the decaying wrecks of large trees, indicating great inundations. The east bank has here an elevation of twenty feet, is covered with long grass, and thickly wooded with a luxuriant growth of the white eucalyptus. From the *total absence of every appearance of animal life*, an air of solemn tranquillity is impressed upon the scene. Captain Stokes climbed the highest tree on the eastern bank, and the landscape presented to his view was an almost uninterrupted level; open woodlands, with here and there grassy spots, were its prevailing features. Proceeding further, the explorers entered a lake-like reach of the river, trending south for a mile and a quarter, the breadth about one hundred yards, and the depth in many places of twelve feet (twice that usually found in some of the lower reaches), and no current. A coarse red-grained sandstone, with fragments of quartz, were found on the west bank for nearly a quarter of a mile along the edge of the water; over many parts of it was a coating of a dark and metallic appearance, about three inches thick, and the surface in places presented a glazed or smelted appearance. After passing this canal, the Fitzroy divides into two branches, one having an E.S.E., and the other S.S.E. direction; both are with difficulty navigated by boats, and are deep reaches connected by shallows, and subject to inundations, during which the water rises to a height of twenty feet. The country on the westward, as far as could be seen from a high tree, is open, with clumps of small trees, and green grassy patches between them. In other directions it is densely wooded, and on the eastward the trees are large. The ex-

ploration was given up in $17^{\circ} 44'$ S. lat., $124^{\circ} 34'$ E. long., the river having been traced twenty-two miles in a general S.S.W. direction, and ninety miles from the coast line. At this point, the channel of the southerly branch was found to be wholly choked with islets and sunken trees; the banks were twenty feet high, and covered with grass; partially broken or washed down, they disclosed to view a rich alluvial soil, nearly two feet deep. The trees seen were chiefly two species of palm, three of the eucalypti, stunted Banksia, acacia, and a singular tree with a rough bark like the elm, and a deep dark green foliage.

The Buccaneer's Archipelago consists of many islets, skirting the coast between Prince Regent's inlet and King's Sound. The land in the interior is rugged and lofty, and the shore much indented with several fine harbours. The outline of the coast about Cape Leveque itself is low, waving, and rounded, and the cliffs, as is generally the case on the north and north-west parts of Australia, of a reddish hue; but on the south of the high ground at Cape Leveque, the stoney cliffs are succeeded by a long tract which appears to consist of low sandy land, fronted by extensive shoals.

Dampier's Archipelago, and the adjacent coast, is still but partially surveyed: the shore is rugged and broken.

Depuch Island, on the north-west coast, in $20^{\circ} 37'$ S., $117^{\circ} 44'$ E., presents a singular contrast with the low, flat shores of the main land, from which it is only a mile distant. It is of a circular form, eight miles in circumference, and is composed of a vast pile of large blocks of greenstone, heaped up in rugged and irregular masses, to the height of 514 feet. It has much the appearance of basalt: here and there, near the summit, are a few stunted green trees; but, generally speaking, the island is devoid of vegetation, and very different from the other low islands of Forester's group, of which it is the chief.

From *Cape Preston*, in 21° S. lat., to Exmouth Gulf, the coast is low and sandy, and does not exhibit any prominences. The west coast of Exmouth Gulf is formed by a promontory of level land, terminating in the *North-west Cape*: from thence to the south-west, as far as Cape Cuvier, the general height of the coast is 400 to 500 feet. No mountains are visible from the coast-range.

Kok's Island, in the *Geographe Channel*, is very remarkable; nearly a table land, about a quarter of a mile in length, terminating in

low cliffs at each extremity, and on the summit of this table land are several large rocks, which look like the remains of pillars. *Bernier* island consists of sandy dunes, arranged in right lines, lying south-east and north-west—the direction of the prevailing winds. There are no trees or grass. *Dorre* is similar to *Bernier*, only the surface is higher.

Shark's Bay, and the continuous western and southern shores of Australia, will be described in the respective books of Western and Southern Australia.

I have now endeavoured to present a connected view of the tropical coast-line, including the north-east, north, and north-west shores of the island continent; a few general observations on Geology and Climate will follow an outline of the—

PROGRESS OF INLAND DISCOVERY. — It would far exceed the limits of the present work to enter into a detail of the toilsome and perilous explorations of the brave adventurers, who, at the imminent hazard, and, in too many instances, at the sacrifice of their lives, have acquired the yet imperfect information we possess concerning the interior of this vast continent. It must therefore suffice to enumerate the most important of these expeditions; dwelling more especially on those which have led to practical results. From the very commencement of the settlement at Port Jackson, strenuous endeavours appear to have been made by the colonists to penetrate beyond the mountain-belt, already described as forming the leading feature in the physical aspect of Australia. The efforts of Messrs. Bass, Caley, Barrallier, and others, were totally ineffectual, and the formidable barrier remained unpassed until the year 1813, when the country was visited by a fearful drought; the land from the sea-coast to the base of the hills was burnt up; the secondary water-courses entirely failed, and the cattle, hemmed in on all sides, died in great numbers for want of pasturage. The colonists were in despair, when three enterprising individuals, Messrs. Blaxland, Wentworth, and Lawson, united in making one more attempt to find a pass over the *Blue Mountain ranges*. They ascended the mountains near the Grose River (a tributary of the Hawkesbury), and by keeping steadily in view the fall of the waters into the Warra-gumba, on the one side, and into the Grose, on the other, which no previous explorer had thought of doing, they maintained their position on a main range, and notwithstanding

its intricate windings, eventually penetrated to a distance of twenty-five geographical miles, due west from the Nepean river to a terminating point in those mountains, whence the eyes of the enterprising adventurers were gladdened by the prospect of a grassy and well watered vale, extending apparently some miles to the westward. On their return, Mr. W. Evans, the assistant surveyor, was despatched by the same route, and the Downs of Bathurst, the river Macquarie, and the Lachlan were shortly afterwards discovered. In the following year a practicable line of road was constructed, by convict labour, over precipitous ridges, some parts of which rise 3,400 feet above the level of the sea. In the winter of 1817, an expedition headed by captain Oxley, then surveyor-general, and including Allan Cunningham, was sent to trace the Lachlan. Its long and tortuous course, during which it was not found to receive a single tributary, was followed through a flat inhospitable country, beyond the westernmost range of hills, to an interior, a dead level, forming a chain of plains, which appeared alone bounded by the horizon, whose ample surface bore evident proofs of being, in seasons of continued rains, extensively inundated. Over these Australian steppes Captain Oxley made his way, notwithstanding the slimy nature of their surface, and the distressed state of his horses, for about 100 miles to the westward of the last hill-like undulation of that part of the interior, when his progress was arrested, in $144^{\circ} 30'$ E. long., by impassable morasses, the river having divided itself into several small channels, and its waters having become perfectly stagnant and unfit for use. In 1818, Captain Oxley started to explore the Macquarie downwards from Wellington Valley, but his persevering research was again attended with disappointment, the river being traced to a low marshy interior, where the country became "perfectly level," and the flooded river eluded further pursuit by spreading its waters far and wide. Into this expanse of shoal water captain Oxley descended in a boat, amidst reeds of such height, that having totally lost sight of land and trees, he was compelled to return to his party, whom he had left encamped on Mount Harris, a detached hill on the river's bank, elevated about 200 feet above the plain of the neighbouring flats. It being at that time perfectly impossible to penetrate the apparently unbounded morass, captain Oxley, unable to proceed in a westerly direction, determined to prosecute his discoveries east-

erly, in the parallel of $31^{\circ} 15'$, in which latitude his examination of the river had terminated. In his progress easterly, Liverpool plains, and a hilly, picturesque, and well watered country, were discovered. The expedition reached the coast at Port Macquarie, in $31^{\circ} 30'$ S. lat., and proceeded thence along the shore to Port Jackson. In the course of his journeys in 1817-18, captain Oxley advanced upwards of 500 miles beyond the Blue Mountains, and experienced one of the peculiar dangers attendant on Australian explorations, namely, the rapid rush of water from the mountains after heavy rains. In some instances the river column advances with terrific fury, sweeping every thing before it, and presenting the appalling prospect of a moving cataract, with an elevation of twenty to forty feet. Captain Oxley and his party were nearly overtaken by one of these inundations, but were providentially saved by being in the vicinity of a hill. Had he been near the margin of a stream, or in one of the vast savannahs, nothing could have preserved the gallant officer and his companions from destruction. — (*Vide* Allan Cunningham's paper in the *Geographical Society's Journal*, 1832).

About this time (1819) the Murrumbidgee was discovered, and minor excursions were immediately undertaken; but the fine open country watered by that river, and now called Brisbane Downs, was not known until 1823. Towards the close of the following year, Messrs. Hume and Hovell, two enterprising colonists, resolved upon attempting the exploration of the extensive and unknown tract of country situated between the colonized territory and Bass' Straits. They started from a stock station near Lake George, with the intention of pursuing a direct course to the south-west, expecting to arrive at the coast near Western Point, but a range of mountains, connected with those of the Murrumbidgee, through which, with burdened cattle, they found it impossible to penetrate, compelled them to follow an entirely west course, until, having passed the meridian of 148° , they were enabled to resume their original direction. In 36° S. lat., the party discovered a fine stream, flowing with considerable rapidity among the hills, which, from its depth and breadth, they had difficulty in fording. To this river they gave the name of *Hume*, but it was subsequently called the *Murray*, by captain Sturt, who explored its lower course. The travellers pursued their way over an undu-

lating, grassy, and well-watered country, and crossed two other streams, which they named the *Ovens* and the *Goulburn*. At length, having advanced nearly 400 miles beyond the remotest settlements, they emerged upon a sandy beach of the sea shore, considered by Mr. Hume to be that of Western Port, but which was, in reality, the north-eastern side of Port Phillip—half a degree to the westward of the point at which they supposed themselves to have arrived. In returning home, Messrs. Hume and Hovell travelled considerably to the westward of their outward-bound track, and on a much lower level, avoiding entirely the broken, hilly country which had previously proved so harassing to their cattle.

In 1827, an expedition was despatched under Allan Cunningham, to explore the country between Hunter's River, 32° S. lat., and Moreton Bay, in 27° S. lat. Crossing the dividing range to the westward, he skirted the eastern side of Liverpool Plains, bisected (what were afterwards found to be) the tributaries of the Darling, and discovered the extensive and valuable tracts of pastoral country now known as Darling Downs, Peel's, and Canning's Plains. In the following year, Mr. Cunningham succeeded in finding a practicable line of road through the mountain chain between Moreton Bay and Darling Downs, which the extent of intractable and difficult country between those plains and the Hunter rendered of great importance. Meanwhile, the extreme drought which had now (1828) continued upwards of three years, induced the local government to attempt again to ascertain the state of the interior. An exploring party, including Mr. Hume, under the direction of captain Sturt, (the present colonial secretary of South Australia,) proceeded to Mount Harris, on the Macquarie. Upon reaching the summit of that eminence, a prospect presented itself which formed a striking contrast to that beheld by captain Oxley, from the same spot, ten years before—the extensive morass into which the surveyor-general had descended in a boat, being now transformed into "a large and blasted plain," parched, by extreme heat, into deep and dangerous clefts. About twenty-eight miles below Mount Harris, the Macquarie was found to terminate, having no longer a continuous bed, and the plains or steppes commence; each of them having a lagoon-like channel, surrounded by high reeds which, in the rainy seasons, catch, and for a while

detain the spreading waters, until a slight declivity, giving them a fresh impetus, they arrive at a second channel, and thence at a third, until a considerable extent of country is laid under water—a space, fifty miles in length, and thirty miles in breadth, being subject to be thus deluged. Captain Sturt found another river (unfortunately for the explorers, of salt water) which he named the Darling, and whose course he traced for a considerable distance. In this expedition friendly and frequent intercourse was maintained with the natives, who were suffering fearfully from a cutaneous disease, caused by the badness of the water, and the intensity of the heat, which seemed alike oppressive to animal and vegetable life.

In 1829, captain Sturt proceeded from Sydney to explore the Murrumbidgee, and having traced it down its right bank to $34^{\circ} 25'$ S. lat., $143^{\circ} 57'$ E. long., he there launched a boat which he had conveyed overland, and another, which, by extraordinary energy and perseverance, had been built on the spot; from thence, advancing about twelve miles to the westward, he found the morasses into which the Lachlan had been traced, drained through a "large creek" into the Murrumbidgee; still pursuing a westerly course, through a level and monotonous country, a week's difficult and dangerous navigation was richly rewarded by the discovery of the junction of the diminished waters of the Murrumbidgee with "a broad and noble river," which he named the Murray, and commenced exploring; after following it in a westerly direction for about a hundred miles, the expedition arrived at a third confluence formed in 34° S. lat., 141° E. long., by a river flowing from the north-east, which notwithstanding the freshness of its waters, captain Sturt considered could be "no other than the Darling." Still pursuing the course of the Murray, captain Sturt passed another of its tributaries, which he named the Lindesay, and describes as a considerable stream, flowing in from the south-east. At length, after some intricate navigation, the forest-clad ridges which mark the eastern shore of the Gulf of St. Vincent became visible; the river in $139^{\circ} 46'$ E. long. took a bend to the south, and was traced by the party to its entrance in the broad expanse of Lake Alexandrina or Victoria, which they traversed until stopped by the sand banks that separate it from the sea at Encounter Bay.

In 1831, a new impetus was given to internal exploration by the plausible state-

ments of a bush-ranger named George Clarke, sentenced to death for cattle-stealing, who, having for a considerable time taken refuge with the natives, had acquired a knowledge of their language. He declared that he had himself twice followed the course of a very large river, from the Liverpool Plains to the sea-coast; and the acting governor, sir Patrick Lindesay, was induced to despatch an expedition under the surveyor-general of the colony, then major, now lieutenant-colonel Sir T. L. Mitchell, to examine the country in a northerly direction. The result of the journey, although the convict's report proved untrue, was in other respects satisfactory, Major Mitchell having discovered the Darling to be a *fresh-water* river in 29° S. lat., where it receives the Nammoy, a fine stream watering an open pastoral country, but beyond this point, the murder of two men by the aborigines, and the seizure of provisions, prevented the expedition from exploring. In 1835, major T. L. Mitchell proceeded about 300 miles up the river Darling, in a direct line. He found the country in general "unfit for any purpose," with the exception of "a strip of land near the river;" to the westward it resembled a desert. On the return of the expedition, by the dried up channel of the Bogan, in whose ponds, however, water was occasionally found, Mr. Richard Cunningham, having diverged from his companions, fell into the hands of the natives, by whom he was barbarously murdered. In 1836, Sir Thomas Mitchell, with a view of reaching the same point on the Darling which he had quitted the previous year, followed (in order to avoid the hostile tribes he had then encountered,) the empty bed of the Lachlan to the Murrumbidgee, and thence to the Murray, which he traced to its junction with the river rightly supposed by captain Sturt to be the Darling, which latter stream he examined sufficiently to identify. He then turned to the south, and tracing the course of the Murray upwards, discovered between it and the sea a fine, open, uninhabited, and well-watered country, averaging in extent 400 miles from east to west, and 250 from north to south, which he named Australia Felix, and in which the flourishing colony of Port Phillip, or Victoria, is now established. In 1837-8, lieutenant Grey (now governor of New Zealand,) and lieutenant Lushington undertook the examination of the country about Prince Regent's inlet, hoping to discover, in the vicinity of Dampier's Archipelago, some

river by means of which they might be enabled to penetrate the interior. Their expedition has been already adverted to in the description of the coast line, beyond which insurmountable obstacles prevented their exploring for a greater distance than sixty miles.

In 1840, useful surveys were made by Mr. Tyers between Port Phillip and the river Glenelg, and by Mr. Dixon at Moreton Bay; and, in the same year, Gipp's Land was discovered by the able geologist and indefatigable explorer, count Strezelecki, to whom we are indebted for the physical description of New South Wales and Van Diemen's Land, a work which, to quote the words of the author, "comprehends the fruits of five years of continual labour, during a tour of 7,000 miles on foot."

In June, 1840, Mr. Eyre, who had previously conducted several minor explorations, was intrusted by the colonists with the guidance of an expedition destined to attempt afresh to penetrate the interior, the plan of the intended journey being—first, to examine Lake Torrens, and then to proceed, as far as possible, in a northerly direction. Lake Torrens was found by Mr. Eyre to be completely girded by an outer ridge of sand, covered with salsolaceous plants, and with saline crusts, showing above the ground, at intervals, "the dry bed of the lake, coated completely over with a crust of salt, forming one unbroken sheet of pure white, and glittering brilliantly in the sun, but yielding to the foot, the bed of the lake below the surface being composed of a soft mud." The progress of the party in the intended direction was arrested, it being impossible either to cross the lake, from its boggy nature, or travel along its shores, from "the total absence of all fresh water, grass, or wood, whilst the very saline nature of the soil in the surrounding country, made even the rain-water salt, after lying an hour or two upon the ground." From the dépôt near Mount Arden, close under the hills which form the continuation of Flinders' range, they therefore proceeded to their termination in $29^{\circ} 20'$ S. lat., and reached a low and very level country, consisting of large stony plains, destitute of water, grass, or timber, varied by many small, flat-topped elevations, from 50 to 300 feet in height, composed almost wholly of a chalk substance, coated over on the upper surface by stones, or a sandy soil, and "presenting the appearance of having formed a table land that had been

washed to pieces by the violent action of water, and of which these fragments now remain."

Forcing his way through this dreary region, in three different directions, Mr. Eyre ascertained that "the whole of the low country round the termination of Flinders' range was completely surrounded by Lake Torrens, which, commencing not far from the head of Spencer's Gulf, takes a circuitous course of fully 400 miles, of an apparent breadth of from twenty to thirty miles, following the sweep of Flinders' range, and almost encircling it in the form of a horse-shoe." The extensive but disheartening prospect from Mount Serle first manifested to the enterprising party the impassable barrier by which they were hemmed in; but Mr. Eyre, considering this evidence insufficient, left his party, and proceeded, accompanied by a native boy, for about ninety miles farther, to a "low, haycock-like peak," rising "among broken fragments of table lands," similar to those previously seen near the lake to the north-west, which, naming Mount Hopeless, he ascended, and found his previous conviction entirely confirmed. He then returned to Port Lincoln for supplies, and, rejoining the party, (whom he sent forward to Streaky Bay,) set out to follow the coast line in a westerly direction, hoping to arrive at a practicable country to the north. In this, however, he entirely failed, although he succeeded in penetrating, accompanied by a native boy and a man driving a dray laden with provisions, within twelve miles of the head of the Great Bight, through low, flat lands, or a succession of sandy ridges, densely covered with a brush of eucalyptus dumosa, salt-water, tea-tree, and other shrubs, with, here and there, a few isolated patches of open, grassy plains among the scrub, but no surface-water—not a water-course or pool of any description. This attempt cost the lives of the three best draught horses of the expedition, from fatigue and privation: but Mr. Eyre resolved to make another, taking with him only one of the native boys. He thus describes the sterile region they encountered:—

"Upon rounding the head of the bight, I met with a few friendly natives, who shewed me where both water and grass were to be procured, at the same time assuring me that inland there was neither fresh or salt water, hills, or timber, as far as they had ever been; that there was no more (either fresh water or grass) along the coast for ten of their days' journeys (probably 100 miles) or where the first break takes place in the long and continuous line of cliffs which

extend so far to the westward of the head of the Great Bight. Upon reaching these cliffs, I felt much disappointed, as I had long looked forward to some considerable and important change in the character of the country. There was, however, nothing very remarkable in their appearance, nor did the features of the country around undergo any material change. The cliffs themselves struck me as merely exhibiting the precipitous banks of an almost level country, of moderate elevation (300 or 400 feet), which the violent lash of the whole of the Southern Ocean was always acting upon and undermining. Their rock formation consists of various strata, the upper crust or surface being an oolitic lime; below this is an indented concrete mixture of sand, soil, small pebbles, and shells; beneath this appear immense masses of a coarse greyish limestone, of which by far the greater portion of the cliffs are composed; and immediately below these again is a narrow stripe of a whitish or rather cream-coloured substance, lying in horizontal strata, but which the impracticable nature of the cliffs did not allow me to examine. After riding for forty-five miles along their summits, I was in no case able to descend; their brinks were perfectly steep and overhanging, and in many places enormous masses appeared severed by deep cracks from the main land, and requiring but a touch to plunge them into the abyss below. As far as I have yet been along these, I have met with no indication of any portion of them being composed of chalk. Immediately along their summits, and for a few hundred yards back, very numerous pieces of pure flint are lying loosely scattered upon the surface of the limestone. Back from the sea, as far as the eye could reach, the country was level and generally open, with some low prickly bushes and salsolaceous plants growing upon it; here and there patches of the gum scrub shewed themselves, among which a few small grassy openings were interspersed. The whole of this tract was thickly covered by small land shells, about the size of snail shells, and in some instances resembling them in shape. There were no sudden depressions or abrupt elevations anywhere; neither hills, trees, or water were to be observed, nor was there the least indication of improvement or change in the general character of this desolate and forbidding region."

Mr. Eyre now renounced all hope of penetrating the interior, and breaking up his party, resolved to proceed with one man (who had acted as overseer) and the native boys overland to King George's Sound, which, after extreme perils and fatigue, borne with a cheerful endurance beyond all praise, he succeeded in reaching, accompanied by one only of the boys, the others having deserted him, while the unfortunate overseer had perished by the hands of the natives.

Passing over the interesting excursions of Mr. Frome to Lake Torrens, Messrs. Russell down the Condamine, and others, we arrive at the remarkable expedition conducted by captain Sturt, who left Adelaide in August, 1844, and started up the Darling with a view of tracing the Williorara (Laidley's Ponds) upwards. Instead of a mountain stream, the

Williorara proved to be a mere creek, conveying the backwaters of the Darling to Lakes Cawndilla and Minandichi, and his hopes of gaining entrance to the north-west interior along its banks were completely frustrated. The conduct of the natives at this place was very gratifying, and appears to have been chiefly owing to the favourable impression made by Mr. Eyre during a previous journey up the Darling. "To those exertions," says captain Sturt, "more than to our own prudence, must we ascribe the peaceful manner in which we have passed through the tribes." The aborigines warned captain Sturt most emphatically against attempting to cross the formidable ranges bordering the interior; telling him that they were covered with sharp pointed stones and great rocks, by which if they escaped being crushed, and gained the low country, they there would all perish from the heat and the want of water; moreover, they would find no wood to light a fire with—no grass for the cattle. This appalling picture which (allowing for their exaggerated mode of expression) experience proved to be in many respects correct, did not deter the gallant band, and having succeeded in discovering a practicable pass, they descended into the sterile region, beyond which the most strenuous and continuous efforts failed in enabling them to penetrate. Speaking of the dreary heights by which they were encircled, captain Sturt says, "they seemed to extend in a N.N.W. and S.S.E. direction, forming semicircles, like bays, and having all the appearance of a coast-line. Some prickly acacias in full blossom, a tree resembling a banksia, and a new polygonum, were found on the western slope." The expedition encamped in a sheltered glen on the 27th January, 1845, in 29° 40' 14" S. lat., 141° 30' E. long., and the tents were not again struck until the 14th of July following. They were fortunate in having here discovered an important creek, whose plentiful supply of water alone enabled them to remain so long in the heart of the desert. The sufferings endured by the whole party were excessive, and in July, Mr. Poole (the second in command) sank under them. The excursions made by captain Sturt in all directions, during his protracted sojourn in this "weary land," are too numerous to be even briefly detailed, but the following extracts from his despatches may afford the reader some idea of the dreary wilderness itself, and the perils and fatigue therein encountered:—

"We passed over a country of alternate sand hill and flats, until I struck upon a creek, beyond which the country was more open, and more subject to floods; we crossed over extensive plains, subject to deep inundations, but soon again got on sandhills. From them we descended to a stony plain of boundless extent, on which the horses left no track, and where no object was visible on the horizon from which to take bearings. Crossing these, we descended to flats, like a ploughed field, on which water had subsided, stretching to the north-east and south-west, farther than the range of vision, and without a blade of vegetation. From this we again ascended sand ridges, of most formidable description, and found the country to the west so bad where we attempted to penetrate in that direction, and surface water so scarce, that we were obliged to turn to the north at fifty miles, with only two small puddles to depend on. I struck a creek which I traced up sixty miles, when I got on a country of salt formation, covered with samphire, and other salsolaceous productions, with numbers of dry beds of lagoons, all white as snow, with salt. Passing this, we once more found ourselves among sand ridges, perfectly insurmountable, so close that the base of one touched the base of another—the whole country sand. The sand hills were of a fiery red, and they ran for miles and miles, in parallel rows, with points like the vanishing points of an avenue. But there was neither grass nor water to be found, and after trying all points of the compass, I gave it up and returned to the depôt, after an absence of seven weeks, and a ride of 924 miles.

"The men were all knocked up, and the horses perfectly leg-weary; but I was dissatisfied with this journey, and there was but little time for hesitation. Therefore, after giving the animals six days' rest, I left the camp, taking with me two men and nine weeks' provisions, my objects being to try to enter the tropics, to ascertain if there were any water between me and the north coast, or if the desert extends to the very tropics. I went due north, and struck a most splendid creek at 123 miles from the depôt. Here I had a thunder-storm that lasted half an hour, and left some surface water, dependent on which, I crossed it, and ran out 170 miles without finding a single channel for conveyance of water. I dug five wells, but had little hope of benefiting from them. I was at length brought up by a stony desert, that stretched before us in absolute boundlessness. Where there were sand-hills in it before, the sand-hills were now covered with stone, similar to the plain itself. I was in the centre of a dark and adamantine sea, without any object by which to steer my course. I was forty-one miles advanced in this gloomy region, and fifty-two from water. My horses had already been one day without water, and I could not hope to reach the other water under a day and a-half, including part of the night; yet I hesitated to turn back. It was an irresistible influence that drove me back, certainly contrary to my own inclinations. I was well-nigh too late. I lost three horses, but that was of no consequence on such an occasion. I got back to the creek, (Cooper's Creek) after having reached latitude $25^{\circ} 45'$, and longitude $139^{\circ} 13'$.

"From the creek on which I was, I had seen high and broken ranges to the north-east, and I now determined on examining them and the creek. I therefore went up the latter 120 miles, but I found that it was leading me away from the ranges, and I ultimately got to its termination, or rather head, in

some extensive plains. The creek was as large as the Darling, and was flanked by a box-tree forest, in grassy land, to a considerable distance from its banks. Here I fell in with a numerous population, passing three or four small tribes every day; but the news of our kind treatment of them had spread through the country, and they evinced no alarm, but did all they could to serve us. From this point I turned westward, and taking up a branch creek, went towards the ranges; but I got into a terrible country, and found that the effects of refraction had deceived me with regard to the ranges, and that they were nothing but masses of sand or rock, 300 to 500 feet high. I saw that I was getting near the scene of the greatest turmoil, where the water passed over this dreary waste, and left the shivered fragments of mountains behind it. Here, again, water and grass failed me, and I was forced to abandon this trying task, being unable to contend against the season and country. I had done all that I could do, and had run the risk of being altogether cut off; indeed, so near was it, that I drained the last drop of mud—for it was not water—out of a pool that four weeks before was 150 yards broad, and 200 to 300 long. I lost two horses, and regretted them very much. I reached the depôt, at length, having ridden 843 miles in five weeks, less three days.

"I had been exposed for twelve weeks to an excessive heat, had had insufficient food, had drunk loathsome water, and at length my iron constitution, under disappointment, anxiety, and weakness, gave way. The day I made the camp, I was eighteen hours on horseback; and when I dismounted, the spasmodic action of the muscles of my thighs was so violent as almost to throw me forward. I had, in truth, ridden all day in great pain. The next day, the scurvy, latent in me for eleven months, seized me. The muscles of my thighs contracted, and I was laid prostrate."

The expedition on their return were joined by a relief party at the junction of the Wilhiorara, and reached Adelaide on the 19th of January, 1846. In a brief summary of the information he had obtained, captain Sturt says:—

"The principal features of the interior are the sandy ridges or dunes, by which it is traversed from south to north, and the Great Stony Desert. That the whole region traversed was once submerged, there cannot, I think, be a doubt. Its salsolaceous productions, its sea-level, its want of trees of any size or growth, excepting on the banks of the creeks, sufficiently attest this; but whether the sandy ridges were thrown up simultaneously, or were successively formed by the joint effect of winds and a gradually retiring sea, or of winds alone, it is impossible to say. When I first crossed the Stony Desert, it appeared to me to have been the bed of a former current; and I felt satisfied that that conclusion was just when I crossed it at another point more than a degree from the first, and noticed the strong proof it exhibited of waters having at one time or other swept over it with irresistible fury. Whether the Stony Desert continues to any distance I cannot say, but my opinion is that it does, and that, as the lowest part of the interior, it receives all the waters falling inwards from the coast. Whether those waters are gradually lost by evaporation, or that they are carried to some still undiscovered sea, remains to be proved; but as it is

difficult for others to elucidate these things, I have thought myself called upon to throw every light I can on the probable character of the interior. All I can say is, that after having traversed a desert for 400 miles and failed to reach its northern limit, and after having found that it continued unaltered for four degrees of longitude, I cannot hope that it speedily closes in, either to the east or west."

With regard to the sandy dunes, he adds:—

"When we first observed them, their general direction was N.E. by N., but they gradually came round to, and settled at, eighteen degrees to the W. of N., or nearly N.N.W., and preserved that bearing with undeviating regularity for more than 300 miles. They occasionally ran for ninety miles without any break in them, and occurred in lines rising parallel to each other, at greater or less distances apart, and were divided by long flats."

During the weary months spent by captain Sturt and his brave party in this stony prison, an exploration of a very different character, and attended by very different results, was made by Dr. Leichardt, an intelligent and enterprising German, who, accompanied by seven persons, quitted Jimba, the farthest station on the Darling Downs, on the 1st of October, 1844, and after a toilsome and perilous journey of 1,800 miles' distance, during which above 3,000 miles were traversed in fourteen months, arrived at Port Essington with his party, excepting only the unfortunate Mr. Gilbert, who was killed by the natives when the expedition had nearly reached the north coast. The party followed the range of mountains which run nearly parallel to the east coast, until they reached the Gulf of Carpentaria, thence followed the coast to the westward, quitted it where it turns to the northward, and proceeded direct across the country. For the greater part of the journey they lived on dried beef, and such game as the country afforded: their sufferings and endurance were very great. In a series of lectures delivered by Dr. Leichardt in Sydney, he stated that in describing the country, according to its conformation and surface, the nature of its soil and vegetation, its supply of water, and its meteorological relations, the whole line of route might be divided very naturally into eight sections, each bearing a peculiar character. By this division it may be well to abide in the following account of the country.

The first section comprises the country between Darling Downs and Peak Range, with the Dawson and the Mackenzie, and is principally composed of sandstone, broken in several localities by basalt (whinstone) which forms either peaks, as Mount Aldis and

Mount Nicholson, or the spine of large ranges, as Expedition Range. The sandstone ranges are remarkable for their numerous and steep gullies, and for their scrubby vegetation. Dr. Leichardt found the country, with a few exceptions, well watered, and almost daily thunder storms cooled the air during the months of October, November, December, and January. Not only the high level land west of Darling Downs, which sloped almost imperceptibly to the south-west, but the valleys of the rivers and the sides of the mountains are covered with extensive scrub, principally composed of a species of acacia, which has received the name of bricklow (brigalow) from the squatters between the Severn and the Condamine. This shrub, or small tree, has a foliage of greyish-green colour, and grows so close, that it is impossible, or only with extreme difficulty, that a man on horseback can make his way through it. Along the hills which bound Palm-tree Creek and the Dawson at their junction, this scrub surrounds the Downs, which are frequently several miles in extent, and are rendered extremely picturesque by small copses of bricklow, fusanas, and baubinia scattered over them, and often clustered round stately bottle-trees, the shady retreat of kangaroos and wallobis. These downs and plains are covered by various grasses and herbs; but the great prevalence of vervain induced Dr. Leichardt to name them the Vervain Plains. Looking from an eminence at the north-west side of Expedition Range, Dr. Leichardt describes the disheartening prospect of a valley nearly boundless to the eye, filled by an "almost uninterrupted sea of scrub," but the upper part of the Dawson—Palm-tree Creek, with its swampy lakes, its fine flats and noble palm-trees; part of Robinson's Creek, the Creek of Ruined Castles, and the country south-east of Expedition Range, he speaks of as so many places of rest and enjoyment, where the drooping hopes of the party brightened, and their energies revived. The banks of the Mackenzie, so far as they were traversed during this expedition, partook of the scrubby character of the country, but Dr. Leichardt saw reason to believe that the scrub ceased a little lower down, while its large supply of water led him to suppose it formed a considerable stream towards the sea-coast. The natives, when questioned concerning the course of the river, pointed to the north-east, and it probably disembogues at Broad Sound, in lat. 21° 30'. The country south-east of

Expedition Range, between Zamia Creek and Erythrina Creek, was found to be for a considerable distance to the eastward flat and openly timbered; affording good pasturage and tolerably well provided with water at the foot of the range. Its latitude was $24^{\circ} 50'$, but the course of its waters appeared to be directed either to Port Curtis or to Keppel Bay. Should a practicable communication with the sea-coast be discovered, there is little doubt of this district becoming valuable for pastoral purposes, and that even the good country of Castle Creek, Robinson's Creek, and Palm-tree Creek, will be accessible from this side.

The second section, comprising Peak Range, the Isaacks, and the Upper Suttor, presents a very different character from that just described. A long range of noble peaks, composed of dolomite, extends far to the W.N.W., and offers to the west and south-west a wide view over basaltic plains and open downs, alternating with low and openly-wooded ridges. To the eastward of those peaks, basaltic ridges, with gently undulating outlines, narrow plains, and abrupt sandstone ranges, form numerous valleys, along which creeks descend to the eastward, winding in their lower course through an immense level country, and joining the Isaacks, which comes from the north-west, and forms the chief outlet of the waters to the sea. An open forest covers the whole district, with the exception of some narrow belts of scrub along the Isaacks, and on the sandstone ranges; and the most luxuriant grass clothes not only the black soil of the basaltic plains, but the stiff flats and the sandy bergs along the creeks and river. The supply of water was found to be so little in proportion to the number or size of the channels, that on the magnificent downs of Peak Range, Dr. Leichardt and Mr. Calvert nearly perished for want of water. It was here, also, that they felt, for the last time, a hot wind from the west and south-west, coming from the yet unpenetrated interior. Water-holes existed, however, in the upper part of the eastern creeks, and swampy lagoons seemed to become numerous down the Isaacks, which is supposed to join the sea in Broad Sound, near the Mackenzie. The Upper Suttor partakes of the character of the Isaacks, from the head of which it is far more accessible than from its own lower course. Numerous flocks of emus roam over the beautiful country at the head of the Isaacks and the Suttor, and the immense tract

which spreads out round the foot of Coxen's Peak.

The third section, comprising the Lower Suttor, the Burdekin, and the country between the Burdekin and the Lynd, is characterised by its supply of running water, its primitive rocks, its limestone, its numerous ranges, and fine, open, well-grassed forest. Dr. Leichardt says, that several (comparatively) large tributaries, as the Cape, the Clarke, the Perry, drain, in all probability, extensive tracts of available country, while the elevation on the upper course of the Burdekin, renders the climate cooler than might be expected from the latitude. The basaltic table-land is exceedingly rich and beautiful. The open forest of narrow-leaved iron bark and box, on a sound and rather stony ground, alternates with plains of various extent, abundantly grassed, and watered by numerous brooks and springs. Large and deep lagoons lie scattered over the valley, or parallel to the river, whose course runs strongly over its sandy, pebbly, or rocky bed. But the approach to this interesting country is intercepted by a very mountainous region, and by deep creeks, over which more practicable roads will no doubt be found in the progress of colonisation. The basalt appears to have been broken by a still more recent eruption of lava, which expanding partly over it, has formed as wild and irregular fields of rock as ever covered the slopes of a volcano.

From the ridges and mountains which rose above the table land, the waters descend not only to the valley of the Burdekin in a south-east direction, but also to the north-east and to the westward. The country along the creeks is open and flat, so long as they pass over the table land; but when they descend their channels deepen, their banks become surrounded with steep ranges, and their beds are either formed by solid rock or covered with loose shingle and boulders, which render it impossible to travel within or along them.

The fourth section embraces the Lynd, the Mitchell, and the east coast of the Gulf of Carpentaria. The fall towards the level country, which forms a broad belt round the Gulf, is much more rapid than the ascent from the east coast; and the course of the Upper Lynd is much more mountainous and wild than that of the Upper Burdekin. The same succession of rocks, granite, talchiste, porphyry, and sandstone, are observable in descending to the Gulf, as at the east coast in ascending the table-land, but limestone was not met with (by Dr. Leichardt) on the

west side of York peninsula, though it appeared extensively developed on the Burdekin. Basalt has broken through the various rocks, but the level country is formed of a clayey ironstone, intermixed with grains of quartz, which extends all round the Gulf to Port Essington, and may be considered of newer formation. The Lynd was found to be joined by several running creeks, and well supplied with water during its whole course. The country was openly timbered and well grassed; and at the lower part of the Lynd and parallel to the Mitchell, very large and deep ponds were discovered, around which the pasture was particularly rich. The rivers within the tropics are almost all remarkable for the immense width of their beds, which are filled with sand, with the exception of those spots on which the naked rock crops out, and are often over-grown with small trees, whose number and size depend upon the frequency and strength of those volumes of water which occasionally sweep down. That of the Upper Lynd, for instance, was found to be covered with trees, whilst the bed of the Mitchell was entirely free from them, and water-marks were observed above the level of the bed—showing that a large body of water flows down to the sea in, perhaps, unusually rainy seasons.

Large tracts of country on the east coast of the gulf are covered with box (a species of eucalyptus), and with a small tea-tree with broad lanceolate leaves. The finest and most available land lies along the creeks and rivers; the soil is there much lighter, and the blood-wood, the leguminous iron-bark, and the pandanus, grow well on it, forming an open forest. All the rivers of Australia have lines of holes and hollows parallel to them, which are generally filled by high floods, and keep the water much longer than the rivers themselves. Lagoons of this description are numerous along the Staaten, the Van Diemen, the Gilbert, and the Caron, and appear to be constantly resorted to by the natives. To the north of the Staaten, towards the sea-coast, there is a succession of plains, but the grass is generally stiff and wiry. If we compare the course of the rivers on the east coast of the Gulf of Carpentaria, it will be considered remarkable that the Lynd, which rises in the latitude of the head of the gulf from the table land of the York Peninsula, should go to the N.N.W. and belong to a system of waters which joins the sea in 15° S. lat., instead of taking a direct course to the west, and disemboguing

in or near the head of the gulf. A number of coast rivers, of probably very short courses, the Nassau, the Staaten, the Van Diemen, Gilbert, and Caron, take their origin from the moderately elevated country which bounds the valley of the Lynd and Mitchell to the westward.

The fifth section comprises the Plains of Promise, so called by captain Stokes, which extend from the Flinders to the Nicholson, and are drained by the tributaries of three large salt-water rivers or creeks, the most westerly of which is the Albert of Stokes, and the Maet Suyker of the Dutch navigators. These plains Dr. Leichardt found covered with various tender grasses and herbs, interspersed with a few straggling trees. The narrow valleys of the creeks were filled with open scrub, formed by a small tree, whose fresh-cut wood has the odour of raspberry jam.

The sixth section of Dr. Leichardt's journey between the Nicholson and the Roper, is remarkable for the number of large, salt-water rivers, the density of its tea-tree scrubs, and the extent of its stringy-bark forests. Here, again, are hills and ranges, while pebbles of granite and porphyry indicate that the great arc of high land which sweeps round the head of the Gulf of Carpentaria approaches the sea-coast. The Van Alphen, the Abel Tasman, the Robinson, the Macarthur, and the Limnen Bight River, form broad channels of water, and occasionally afford magnificent prospects, especially cheering to eyes wearied by the monotony of the dense scrub.

The seventh section lies between the Roper and the high land of Arnhem's peninsula. The Roper is a large fresh-water river, fed by a great number of running creeks and brooks, all closely fringed by belts of pandanus. Almost the whole country along the river is open, well grassed, and available for depasturing purposes. At its upper course fine plains, bound by sandstone ridges, and diversified by pandanus creeks, form an extremely pleasing landscape. The high land is covered with an open, stringy-bark forest on a sandy soil; but its level is frequently interrupted by steep rocky sandstone hills and ridges, at the foot of which tea-tree swamps, with a peaty soil, form frequently the head of creeks. The fall of the high land of York peninsula is more sudden to the westward; the same is the case, in a still higher degree, in Arnhem's Land; for there is not only a very rapid fall in the

creeks, but there are precipices from 500 to 800 feet high, bordering the valley of the South Alligator River, over which numerous cascades rush down to join their waters with those of that river. It is remarkable, that the only slope which allowed the explorers to descend into the valley was formed of granite, whereas the whole of Arnhem's Land, and the ranges of the Roper, are composed of sandstone, which, near the divisions of the waters of the Gulf of Carpentaria and the north-west coast, has been broken through by basalt.

The eighth, and last section comprises the two Alligator rivers, and the Coburg peninsula. Its leading features are large swampy lagoons, extensive plains at the lower part of their course, densely-wooded ironstone ridges, and a great number of creeks in the Coburg peninsula, with limited flats of light alluvial soil, richly clothed with herbs and grasses during and immediately after the rainy season. These creeks generally enlarge into swamps, called "Mariars" by the natives, before they are lost in the mangrove thicket which covers their junction with the sea.

Concerning the capabilities of the country whose leading features have been above described, Dr. Leichardt thus expresses himself:—

"To the question of how far this country is available for colonization, I would reply—the greatest part is fit for pastoral purposes, excepting only the scrubs of the east coast of Australia, the mountain gorges of the Upper Lynd, and the tea-tree scrubs of the west coast of the Gulf of Carpentaria. But even here broad belts of fine country extend along both sides of the larger rivers, and will very probably be found quite as good as the country of the Roper. Horses and cattle will do well over the whole extent, particularly at Expedition Range, along the Isaacks, the Burdekin, the east coast of the gulf, and on the plains at its head. The rapid increase of the buffaloes on the Coburg peninsula, and the excellent condition of the herd of cattle which they keep at Port Essington, show that the north-west coast of Australia is no less favourable for the development of animal life. The elevation of Peak Range, and of the table land of the Burdekin, leads me to believe that these regions are fit for sheep. I am not sufficiently acquainted with the cultivation of tropical plants to give a decided opinion, but there is such a variety of soil, of aspect, and of elevation, that I feel convinced tropical plants will grow freely where sufficient moisture exists. The cotton, the indigo, the cocoa-nut, the banana, the arrow-root, the sweet potato, the bread-fruit tree, the jack-fruit, the soursop, the pineapple, the mango, and mangostine grow well in Port Essington; and captain Macarthur assured me that, according to the statement of the Malays, who had examined the swamps west of the settlement, they would do excellently for growing rice. The large plains of the Alligator rivers would suit equally well, and to an almost unlimited extent."

A third very important exploration was undertaken during the absence of captain Sturt and Dr. Leichardt. The surveyor-general, Sir T. L. Mitchell (whose former journeys have been briefly noticed), started from Sydney with a well-equipped expedition, in December 1845, one chief object being "the discovery of a good practical line of road to the nearest part of the Indian Ocean to the westward of Torres Straits, toward the Gulf of Carpentaria." The season was unpropitious by reason of great drought, and the intended route by the Bogan was found to be impracticable, from the scarcity of water in its channel. The intense heat killed all the Kangaroo dogs, most of the party were afflicted with ophthalmia, and the draught oxen were so much distressed that some of them dropped dead on the journey. A fortnight's halt was made at the ponds of Cannonba, between the Bogan and the Macquarie, during which time some refreshing rain fell, and from thence the expedition journeyed along the left bank of the Macquarie, and skirting the western limits of the marshes, proceeded to its junction with the Darling in $147^{\circ} 33' \text{ E. long.}, 30^{\circ} 6' 11'' \text{ S. lat.}$ While tracing the attenuated channel of the Macquarie among the reeds, where water, though scarce, was still to be found in ponds, Sir Thomas was startled by the report that "a flood was coming down from the Turon mountains, but that it travelled slowly and would not arrive until the following evening." At the time stated, a murmuring sound, like that of a distant waterfall, was heard, mingled with occasional cracks, as of breaking timber; very gradually the noise increased, until at length the flood burst into sight, glittering in the moonlight, and filling the dark and dry bed of the river with water brought a distance of 400 miles. Sir Thomas, after a graphic description of this singular spectacle, adds—"We thought then that there was an end of all our troubles, but in a few days after, in the same channel, we were just as badly off for water; that water had gone to fill thousands of lagoons, and never reached the channel of that river to which it was a mere tributary." Crossing the Darling, the party succeeded in reaching the swamp in which the Narran terminates; tracing that stream upwards (or northwards) to its junction with the Balonne, in $148^{\circ} 25' \text{ E. long.}$, they found it full of water and increasing in size and importance as it was ascended, with grass or the very best description on its banks. Pani-

cum lævinode (barley grass), the seeds of which, bruised between stones and baked into cakes, constitutes the chief food of the natives; and *Anthistirium Australis* (Kangaroo grass) grew on the plains in the open forests.

The banks of the Balonne minor seemed thickly peopled with friendly natives, who assisted the party in finding a way for the carts among the numerous lagoons, and guided them across the Culgòda. "From thence," says sir Thomas—

"I travelled to the upper Balonne, with the intention of proceeding northward along its right bank. That great river is there at its maximum, and is only inferior to the Murray in breadth and depth. Lower down it separates into various channels—the first branch being the Culgòda, falling into the Darling, about thirty miles above Fort Bourke—the remainder, or minor Balonne, again spreads its waters into the Narran, the Bokhara, the Ballandoola, and the Biree; the latter three, I believe, again unite, and fall into the Darling forty or fifty miles above Fort Bourke. Tracing the Balonne upwards, I found the country on its banks well covered with good grass, and we encountered only a small proportion of scrub. Some of the reaches were so broad, deep, and extensive, that I could not suppose this river contained only the waters of the Condamine, and I therefore expected to meet with some tributary from the north-west. On arriving at a natural bridge of rock, in $148^{\circ} 46' 45''$ E., $28^{\circ} 2' S.$, I selected a position commanding access to the other bank, and formed there a dépôt, with a small party, examined the country to the north-west. I first made a reconnoissance north-west by compass, and found in that direction, at the end of thirty miles, a poor, sandy, unpromising country."

Returning to the dépôt camp, Sir Thomas proceeded up the river, and followed the Cogoon, a small tributary from the north-west, through a beautiful country, until it led him among some hills, from whence he was enabled to form more extensive and accurate surveys. From Mount Abundance, a double-topped hill, in $148^{\circ} 40'$ E. long., $26^{\circ} 39' 30''$ S. lat., so named from the abundance of good pasturage around it, Sir Thomas looked on the finest country he had ever beheld in a primæval state. A champagne region, spotted with wood, stretching as far as the eye or even the telescope could reach, intersected by river lines from the north. A noble mountain mass arose in the midst, sufficiently elongated in a south-west and north-east direction to deserve the name of a range in about $142^{\circ} 2'$ E. long., $26^{\circ} 23' 32''$ S. lat. To the mountains were given the name of the Grafton Range, and to the surrounding country that of Fitzroy Downs. The sources of the Cogoon were found to arise between the three isolated mountains of Abundance, Bindyego, and Bindango, the

latter being connected by a low neck of grassy downs, with small knolls of trap-rock, to one of the masses of coast range in which the Balonne appeared to have its source. Northward from Bindango, other waters fall to the north-west, and in the remote distance one gap was perceived in a tabular sort of rocky country, through which it was hoped the water course would lead; but in following it down, this promising little river (the "Amby" of the natives) turned to the southward of west. The gap, however, formed a convenient pass, and was moreover a very remarkable opening, containing several conical hills, on which many strange shrubs were growing; one of the hills was composed of basalt.

The country through which the opening led consisted in general of sandstone; southward and back from the pass much good open forest land appeared around. In the country beyond, some smoke which arose in the woods excited the hopes of the surveyor-general, and following in the direction thus indicated, he came "upon a river fully as large as the Darling," called by the natives the "Maranoa." To the westward and northward of the sandstone ranges, lay a well-diversified country, with abundance of grass, some water, and finely-shaped hills, in groups, and also detached cones. But the river leaving that lower country, forced its way among rocky cliffs, where its course was traceable by the open ground along its banks, to be steadily south-west, receiving, of course, the river "Amby," which had turned also in the same direction. Sir Thomas traced the Maranoa upwards, and found that two tributaries joined it from the west, but they arose in subordinate sandstone ridges, and contained little water, while the main channel was dry and full of sand, water being less easily found there than in the sandstone gullies by which it was there enclosed. From Mount Owen (a cone in the range before mentioned,) the main channel of the Maranoa is visible coming through this range from mountains beyond it. Of these mountains the most lofty part, being remarkable for its extreme flatness, was named Buckland's Table Land. The account given by Sir Thomas in his despatches, of the discovery of valuable land made at this period of the expedition, is very interesting:—

"Continuing my ride to the north-west," he says "I again found a chain of volcanic summits connected with a mass of table land which I named (finding

none of the Aborigines there,) Hope's Table Land. Between it and the still higher range towards the coast lay a very broken sandstone country, which was difficult to pass through with carts; but when I had at length discovered, beyond Hope's Table Land, the head of another promising river falling to the north-west, we soon found a way, through which my indefatigable party led the carts and bullock-team without the least damage. Mount P. P. King, a pointed volcanic cone, in long. $147^{\circ} 37' 40''$ E., lat. $25^{\circ} 9' 10''$ S., is near the head of that river, which we followed down until it turned, as all the others had done, to the south-west, and I was again obliged to halt, and take a long ride to the northward, where another chain of summits extended westward nearly under the 25th parallel of latitude. Beyond that range, whose summits are all of trap rock, I found deep sandstone gullies; and in following down one of these, I reached an extensive grassy valley, which terminated on a reedy lake in a more open country. The lake was supplied by springs arising in a swamp at the gorge of the valley which supported a flowing stream of the purest water. This stream spread into the extensive lake, and, to my surprise, was absorbed by it, at least so as to escape through some subterraneous outlet, for the channel of the river in which the lake terminated was dry. The country is adorned by hills of the most romantic form, presenting outlines which surpass in picturesque beauty the fairest creations of the painter. Several pyramids mark the spot where the springs were first discovered. Lower down appear, over the woods, isolated rocks, resembling ruined castles, temples, and Gothic cathedrals. Others have apertures through them, and the trees being also very varied and graceful in form, and rich in colour, contribute so much to the beauty of the scenery that I have been induced to distinguish the river and lake by the name of a painter. Returning to the party, we soon brought the carts and dray down the sandstone cliffs to the banks of the Salvator, and pursued that river downwards until I discovered, which was soon obvious, that its course turned to the eastward of north, consequently that we were upon a river falling to the eastern coast. We lost two days in vainly endeavouring to pass to the westward through dense brigalow scrub, but on a ride which I next took north-westward, I was more successful, for, after forcing my way through ten miles of scrub, I came to what seemed to me the finest region on earth: plains and downs of rich black mould, on which grew in profusion the *Panicum laevinode* grass, and which was finely interspersed with lines of wood which grew in the hollows, and marked the courses of streams; columns of smoke showed that the country was too good to be left uninhabited; and, in fact, on approaching the nearest river channel, I found it full of water. This river I named the Claude, in honour of the painter of quiet pastoral scenery, and to the downs and plains, so favourable to flocks and herds, I gave the name of the Mantuan Downs and Plains. I returned to the party on the Salvator, crossed that river with it in lat. $24^{\circ} 31' 47''$ S., and conducted it, cutting our way through ten miles of scrub, to the banks of the Claude. These two rivers join at a considerable distance lower down, and form the Nogo—a river which, according to the natives, pursues a north-east course to the sea, and therefore, probably, has its estuary on the shores or in the vicinity of Broad Sound. We were obliged to make a bridge for the passage of our carts across the Claude, and then we crossed a plain, where grass grew almost as thickly as in Australia Felix; then

another stream, also full of water, was crossed, and we ascended undulating downs on which fragments of fossil wood were abundant, in a very rich soil. Beyond these (the Mantuan Downs) a range of broken summits appeared, which we found to be the upper part of a very difficult sandstone country, wherein the beds of the gullies were at a much lower level than the downs and plains."

Westward of these the country was quite impervious, the party therefore descended by an open gently declining valley to the head of a creek, falling north-west, but Balmy Creek (so called from the fragrant shrubs growing there) soon led them to the heart of the sandstone gullies, and they were glad to find a favourable outlet to the open country by a pass, in the gorge of which stood a rock so much resembling a tower, that it was difficult to believe it the work of nature. The glen thus entered (Glen Turret) was very extensive, contained abundance of good grass, and was bounded on the east and west by very broken-topped ranges; to the northward the view was over a more distant country. Ascending the most northerly summit of the range on the west, which he named Mount Mudge, the surveyor-general perceived that the course of the river Belyando, which they had followed for a considerable distance in the hope of its leading to the Gulf of Carpentaria, turned at length from the north-west, to the north and north-east, and was, in fact, the river noted by Dr. Leichardt as joining the Suttor in $21^{\circ} 6'$ S. lat.; the party were, therefore, compelled to retrace their steps to their first camp on the Belyando, in $147^{\circ} 17'$ E. long, 24° S. lat. From three remarkable points of the range just behind, Sir Thomas resolved on renewing his search for a river running in the desired direction. These three volcanic cones, called Mounts Pluto, Hutton, and Playfair, form an obtuse angled triangle. Crossing a range of clay ironstone, covered with dense scrub, which extends northwards from Mount Playfair, he discovered the sources of the Warrego, a river flowing south-west, and on the western side followed down the head of another river, falling north-west, which he called the Nive, but which subsequently took a southerly and at length even an easterly direction. Returning disappointed, but not disheartened, Sir Thomas hastened to a gap he had noticed in a western ridge, connected with that to the northward, and ascending a naked rock to the west side of it, beheld in the midst of open plains a line of trees marking the line of a river in a north-west direction, as far as the eye could reach. For ten successive days

the delighted explorer pursued, on horseback, the course of the river, which he named the Victoria, in honour of our gracious sovereign, and found it, in some places, forming broad and important reaches, in others spreading into four or five branches, some of them several miles apart; the whole country being better watered than "any other portion of Australia" he had previously beheld, by numerous tributaries arising in the downs.

"The soil," says Sir Thomas, "consists of rich clay, and the hollows give birth to water-courses, in most of which water was abundant. I found, at length, that I might travel in any direction and find water at hand, without having to seek the river, except when I wished to ascertain its general course and observe its character. The grass consists of panicum and several new sorts, one of which springs green from the old stem. The plains were verdant; indeed the luxuriant pasturage surpassed in quality, as it did in extent, anything of the kind I had ever seen. The myall tree and salt bush (*Acacia pendula*, and *salsalæ*) are also there. New birds and new plants marked this out as an essentially different region from any I had previously explored. That the river is the most important of Australia, increasing as it does by successive tributaries, and not a mere product of distant ranges, admits of no dispute; and the downs and plains of Central Australia, through which it flows, *seem sufficient to supply the whole world with animal food*. The natives are few and inoffensive."

He adds—

"I crossed the river at the lowest point I reached, in a great southern bend, in $144^{\circ} 34'$ E. long., $24^{\circ} 14'$ S. lat., and from rising ground beyond the left bank, I could trace its downward course far to the northward. I saw no callitris (pine of the colonists) in all that country, but a range, showing sandstone cliffs, appeared to the southward, in about 145° E. long., $24^{\circ} 30'$ S. lat. The country to the northward of the river is, upon the whole, the best; yet, in riding ninety miles due east from where I crossed the southern bend, I found plenty of water and excellent grass; a red gravel there approaches the river, throwing it off to the northward. Ranges extending N.N.W. were occasionally visible from the country to the northward."

The diminution of supplies compelled the surveyor-general to return to the camp on the Maranoa river, where the remainder of his party had been stationed for eighteen weeks, and from thence the expedition returned to Sydney, consuming the last of their provisions on the day of their arrival. The fertile and available country thus discovered is roughly estimated by Sir Thomas Mitchell at 160,000 square miles, the soil on the banks of the Victoria being a rich black mould, producing spontaneously all the best grasses known in New South Wales, and five new kinds of excellent quality. The climate was salubrious, for it is one of the strange contrarieties partly accounted for by

the gradual rising of the land, that in proceeding towards the tropics the air becomes cooler. The coast range breaks off in the parallel of 25° at the lofty plateau of Buckland's Table Land, and Sir Thomas Mitchell considers easy access with this fine country might be found from the good harbour of Port Bowen, which has been skilfully surveyed by Captain Blackwood, R.N. The distance between Port Bowen and the head of the Salvator is 220 miles.

On the return of the expedition to Sydney, the local government despatched assistant-surveyor Kennedy to follow up the discoveries of the surveyor-general, and follow the supposed course of the Victoria River to the Gulf of Carpentaria. After an arduous journey, Mr. Kennedy traced the Victoria flowing to the westward and then to the southward, for more than one hundred miles, until a total failure of water and vegetation compelled him to abandon further research in $26^{\circ} 15' 9''$ S. lat., $142^{\circ} 20'$ E. long. His observations led him to believe the Victoria identical with "Cooper's Creek," traced by captain Sturt to $27^{\circ} 56'$ S. lat., 142° E. long., and then coming from the north-east. In $25^{\circ} 9' 30''$ S. lat., and about $143^{\circ} 16'$ E. long., Mr. Kennedy found a considerable river joining the Victoria from the north-east, which he named Thompson's River. It is possible that Mr. Kennedy may have erred in taking a wrong branch or tributary of the Victoria for the main stream, and thus been led too far away to the westward and southward, until he reached the margin of Sturt's desert. Returning to the colony, he passed through a fine country between the parallels of $25^{\circ} 55'$ and $28^{\circ} 15'$, and the meridians of $145^{\circ} 28'$ and $146^{\circ} 44'$, watered by the Warrego River, which he describes as containing "deep reaches of water, occurring at short distances, and increasing in proximity as he advanced. This inexhaustible supply of water is bounded by open forests for the first forty miles, and from thence by extensive plains thickly covered with the most luxuriant pasture, and broken here and there by clumps of *acacia pendula*. I have never seen in the colony any country which surpasses it, and but very little to equal it, either as being adapted for the depasturing of cattle, or any kind of stock." He followed the Warrego to about $28^{\circ} 25'$ S. lat., $140^{\circ} 28'$ E. long. It there divided into two equal channels, which shortly reunite, but only to form the insignificant dry bed of a water-course; the country on either side

being flat, and subject to inundation, void of grass, but thickly covered by a species of small grass and acacia. Mr. Kennedy here left the Warrego, being unable to procure water in either channel of the river, even by sinking wells, "once more disgusted and disappointed," he emphatically states, "as all travellers will ever be who put their trust in the interior rivers of Australia."

Mr. Kennedy was subsequently despatched by the local government on another exploratory journey—but has never returned to the colony, and is supposed to have perished in an encounter with the natives.

An exploration is now in progress, of which some accounts are daily (January 1850) expected. On the return of Dr. Leichardt from Port Essington, the colonists of New South Wales raised by subscription about two thousand pounds in token of their grateful sense of his important discoveries; partly with this fund, and partly by the aid of other contributions, the enterprising traveller fitted out another expedition, and, accompanied by eight persons, started from Moreton Bay in March, 1848, intending to attempt to reach Swan River by crossing the continent from east to west. The journey he supposed would occupy two years, and probably necessitate the traversing of more than 5,000 miles. Should Dr. Leichardt succeed in his meritorious attempt, the mysterious interior of Australia will at length be penetrated, and the question solved on which two leading authorities so widely differ—Mr. Eyre having steadfastly adhered to the belief that no inland sea exists; and captain Sturt still giving it as his opinion that more than one will eventually be discovered.

The foregoing brief account of a few of the most remarkable explorations in Australia, will, it is hoped, convey to the mind of the general reader, some idea of the vast and varied regions so newly trodden by the foot of civilised man. In each Australian colony, a spirit of enterprise and honourable emulation has been manifested and sustained by the colonists, which is abundantly attested by the large amount of territory, not only examined, but absolutely occupied, in the teeth of difficulties which appeared well-nigh insurmountable. I do not attempt to enumerate the long list of Australian explorers whose strenuous exertions have been productive of permanent benefit to their countrymen, and reflected honour on the land of their birth, for in doing so I might possibly omit many

well deserving most honourable mention, but I cannot close this section without paying a tribute of esteem to the gallant officers of the army and navy, who turning, as it were, "their swords into pruning hooks," have yet encountered dangers quite equalling those of the battle-field, and won unfading laurels. The melancholy fate of three individuals is too intimately connected with this subject to be passed over in silence; namely, that of captain Barker, who was speared by the natives while engaged in the cause of geographical research on the south coast; of Mr. Darke, who fell by the hands of the aborigines, in 1844; and lastly of a promising youth, the son of Sir Thomas Mitchell, who perished for want of medical aid, while surveying in winter the Australian Alps.

TIDES.—The tidal wave strikes the whole coast of Australia, from Sydney to Torres Strait, nearly at the same time, viz., at eight o'clock at the full and change of moon. At Cape Palmerston, the rise is from twenty-four to thirty feet, while at Port Bowen to the south, and at Port Molle to the north, the rise is only sixteen feet. At Port Bowen the flood tide comes from the south, while at Broad Sound and to the north, it comes from the north. On the north-west coast of Australia, about Cambridge Gulf and Buccaneer's Archipelago, there is also a limited space where the rise and fall of tide is greater than on the adjacent coasts. At Rockingham Bay, Endeavour River, and about Palm Island, there is no tide at all. At Hanover Bay, on the west coast, the highest tides occur on the fourth day of the full or change of the moon, when they attain a maximum height of twenty-five feet, while during the neaps, the difference between high and low water does not sometimes exceed twenty-four inches. Captain Stokes says that the tides in the head of the Gulf of Carpentaria appear to be a compound of many others, obliterating the common daily difference, and producing only one tide in twenty-four hours. The direction of the flood stream commences at S.S.E., changing gradually to S.S.W. as it terminates; that of the ebb changes from N.W. to N.N.E. The strength of each is from a quarter to one knot; rise at springs, nine to twelve feet; at neaps, three to eight feet. At the entrance of Van Diemen's Inlet, in the Gulf of Carpentaria, it is high water at the full and change of the moon at a quarter to seven, but in the upper part the tides are three hours and a quarter later. The length of both flood and ebb is twelve hours, and

the direction of the flood being from the northward, following the eastern shore of the gulf. There are currents from Breaksea Spit to Torres Straits; from thence it sets to the north-west, but after passing the strait it is affected by the monsoons.

WINDS.—In the tropics the real motion of the earth in an opposite direction to the apparent motion of the vertical sun westward, produces a westerly motion both in the tides of the sea and in the atmosphere; hence the origin of the "trade winds," which extend beyond the tropics into both hemispheres, and shift northerly and southerly with the declination of the sun. These winds tend more to the southward as the latitude increases, and extend farthest into each hemisphere during its summer. A great portion of the southern hemisphere being sea, the extra-tropical wind is much more regular than in the northern, but in both the prevailing wind blows in an opposite direction to the trade; hence on the south and west coasts of New Holland, the south-west wind is the most constant, and it produces an easterly current in the ocean which is felt along the south shore.*

The arid and heated surface which appears to form the interior of Australia, attracts the wind from the north coast, and it blows to the south and east in hot and violent gusts, the thermometer reaching frequently 120° Fahr. I have myself marked the thermometer at 110° Fahr. on Christmas eve in New South Wales. In the winter season, when the land begins to cool, west winds prevail on the south coast. There is no periodical recurrence of dry and rainy seasons between Cape Howe and the tropic of Capricorn, where the variations incident to the torrid zone commence. The south-east trade wind is tolerably regular for three-fourths of the year, and the sea and land breezes steady. From Torres Strait to Cape Van Diemen, the monsoons are felt in the open channel; the south-east wind blows from March or April to November; weather generally fine during the remainder of the year, when the sun is nearly vertical. The north-west monsoon is accompanied by heat, thunder, lightning, and heavy rains. The great size and peculiar configuration of the Gulf of Carpentaria has considerable influence; the south-east monsoon, which is a sea wind, brings the rainy season; the north-west, which is a land wind, brings dry weather.

The north-west coast lying between the

* *Picture of Australia.*

tropics and the east trade wind, and trending to the southward, has not so much of a tropical character, and the east monsoon which begins in April, and blows in gusts, seldom lasts longer than the end of June. The monsoon in summer (December and January), blows from the west, varying a point or two to the north or to the south. In February the west wind dies away; the weather becomes variable, with squalls and heavy rain. Currents follow the wind on the west coast; the general winds are from between the north-west and south, but generally toward the west, and near Cape Leeuwin chiefly from the south-west—in summer, often from the north-west during the night. The ocean current divides into two parts at Cape Leeuwin; one sets east along the south coast, the other north along the west coast.

On the south coast the wind is from the west during the greater part of the year, and easterly only during the latter end of summer in January, February, and March; it is then felt most at projections of the coast, viz., near Wilson's Promontory and King George's Sound.

The land wind on the north-west coast has the same dry and parching character as in New South Wales; when Captain King rounded the North-west Cape in February, and got under the lee of the land, the air which had previously been of a pleasant temperature, became so hot as to produce a scorching sensation. Towards the middle of the north-west coast, he found the temperature at noon in the shade 120° Fahr., and on land ten degrees higher. The north-west and north coasts partake of the unhealthiness of a tropical region, the atmosphere being infected by vegetable miasma. The inter-tropical parts of the east coast, possessing high and diversified land, not so subject to be flooded, and with regular monsoons, appears more salubrious. The general direction of the winds on the west and south-west, south and south-east coasts being from the sea, the temperature in summer is delightful. On the Blue Mountains in New South Wales, and on the Australian Alps in Port Phillip, snow falls in winter, and it freezes there for several months, generally in June, July, and August. Hail falls in large, irregular masses during the summer.

CLIMATE.—Excepting on the marshy shores of the north-west coasts of Australia, the climate of the whole territory is remarkably salubrious; this is proved by the good health

of the Europeans engaged in exploring expeditions even within the tropics, where they have been most laboriously employed for months, exposed to a burning sun by day, without any shelter by night but that of a tree or ledge of rock, and with very imperfect and scanty nutriment. Yet among many hundreds thus occupied, there is in the long list of sufferings from various causes no record of any one dying from fever or other palludial influences. When Dr. Leichardt proceeded on his perilous journey to the north-west, he found the land become more elevated and the climate cooler. He remarks, "The bracing nature of the south breeze at night had a very beneficial influence on our constitutions, and the regular interchange of land and sea breeze contributes everywhere to render a climate healthy." Captains Grey and Lushington on the north-west coast, after twelve weeks' toilsome exploration, did not suffer from climate disease. Neither did captain Stokes and his gallant companions experience illness during their surveys of the Victoria, Albert, Adelaide, and other rivers in tropical Australia, although absent for weeks among mangrove shores, which I know from dear-bought experience to have been so destructive to the health of those engaged in our boat river surveys in Africa, where not unfrequently the entire crew of a well-titled pinnace have perished from exposure to river exhalations during a single night.

GEOLOGY.—Facts on this interesting and important section are necessarily scanty, and insufficient to afford the materials for a general description. Mr. Jukes says, that the mountain chain on the east coast has an axis of granite, with occasional large masses of greenstone, basalt, and other igneous rocks. It is flanked on both sides by thick beds of palæozoic formations, chiefly sandstone, but also containing limestone and coal. In the north portions of the chain, Dr. Leichardt found the same formations, and especially trap and granite, near the Burdekin River. At Port Phillip there are similar igneous rocks, and on the coast tertiary formations resting on the edges of upturned palæozoic beds. In Western Australia, the Darling range consists of granite below, covered by metamorphic rocks, and between it and the sea is a plain, composed of tertiary beds. In Northern Australia, there is a great sandstone plateau, rising to 1,800 feet above the sea, and probably of palæozoic age; whilst on the immediate shore, and

round the Gulf of Carpentaria, are beds supposed to belong to the tertiary period. Captain Sturt found similar substrata in the central desert. It is probable these tertiary rocks are continuous throughout the centre of the island; and during the tertiary period, all this portion of the country was submerged, whilst the high lands on the coast rose like groups of islands from the shallow sea. Captain Sturt supposes Australia to have been formerly an archipelago of islands; and Mr. Gould is of opinion, that at some remote period it must have been divided into at least two portions, since, with few exceptions, he found the species of birds inhabiting the same latitudes of its east and west divisions, differing from, but representing each other.

This immense island appears of *diluvian* rather than volcanic origin, but different causes may have operated conjointly in its formation; after having been left partially dry by the receding of the mighty deep from the north to the south pole, some powerful submarine action, (as in the case of Chili, and other parts of America,) may have raised the crust of our globe, in this spot, above the ocean level, either at one shock, or by a series of successive shocks. But one comparatively recent active volcano is known, viz.—Mount Wingen (see New South Wales Book); but vast quantities of marine shells have been found, at various degrees of elevation above the sea, in some places imbedded in sandstone. On the east coast of Australia, this sandstone strata lies in beds, one on the top of another, in the most regular manner, their original relative situation evidently having never undergone any change. Mr. Berry, who devoted considerable attention to the subject, while admitting that the beds are not invariably strictly horizontal, contends that this may arise from a gentle yielding of the substrata. Some of these beds, though perfectly horizontal and of regular thickness, consist of thin laminae, which incline at a considerable angle to the north-east. This sandstone is principally siliceous; sometimes, indeed, it is argillaceous, and in this state it is generally found over coal, in which situation it is soft and very decomposable. Among the coal measures, thin beds of what may be called calcareous sandstone are occasionally met with. In fact, according to Mr. Berry, the mountain ranges on the east coast of Australia, from Bass' Straits to 19° S. lat., consist, with few exceptions, of vast conglomerations

of sandstone; and he asserts, that there is no granite to be found in masses near the coast for an extent of 1,200 geographical miles. At the 19th parallel, a chain of lofty granitic or primitive mountains appears, of various elevation, forming the barrier towards the ocean for about 300 geographical miles, *i. e.* to the parallel of 14° S. lat. Here the sandstone again predominates, the land gradually dipping till it loses itself in the sea to the north, whence coral reefs extend as far as the eye can reach. Dr. Fitton, in his analysis of captain King's valuable survey, says, that between the parallels of 28° and 12° or 13° , on the east coast, granite is found; at Capes Cleveland and Grafton, Endeavour River, Lizard Island, and at Clark's Island, on the north-west of the rocky mass which forms Cape Melville; while rocks of the trap formation have been noticed, in three detached points, among the islands off the shore; in the Percy Isles, about $21^{\circ} 40'$ S. lat., Sunday Island, north of Cape Grenville about 12° , and in Good's Island, on the north-west of Cape York, in $10^{\circ} 34'$ S. lat.

Along the north and west shores, the prevailing stratum is a reddish sandstone, agreeing so much in character with that of the west of England and Wales, that specimens from the two countries can scarcely be distinguished from each other. An arenaceous cement in the calcareous breccia of the west coast, is precisely the same with that found in Sicily; and the jasper, calcedony, and green quartz approaching to heliotrope, found at the entrance of Prince Regent's River, resemble those of the Tyrol, both in their characters and formation. No limestone occurs among the specimens from the north and western shores; but it is remarkable, that recent calcareous breccia was found by commodore Baudin to exist throughout a span of no less than twenty-five degrees of latitude, and an equal extent of longitude, on the south-western and north-western coasts, and, according to Mr. Browne's specimens, on the shores of the Gulf of Carpentaria also.

This breccia would appear to be a very recent limestone full of marine shells, similar to that which exists on the shores of the Mediterranean and the West Indies. It would be an interesting geological fact, were it ascertained that a distinct line can really be drawn between those concretions of modern formation, which occur on the sea shore, and other calcareous formations very

nearly resembling them, both in the fossils they contain, and in the character of the cementing substances, that are found in several countries, at considerable heights above the sea. An illustration of this remark, indicating likewise the strata of the transalpine country of New South Wales, occurs at the limestone caves at Wellington Valley, 170 miles west of Newcastle, and 2,000 feet above the sea. Sir Thomas Mitchell, the surveyor-general of New South Wales, who discovered the cave in Wellington Valley, sent the following interesting account of it to the Geological Society, which that learned body has, with its usual liberality, permitted me to embody in these pages:—

"The rock, through which the valley has been excavated, is limestone, much resembling in external characters that of the carboniferous series of Europe. This appears on both sides of the valley, above the alluvial deposits in the bottom, and extends on the east to the height of about 100 feet above the stream. On the west of the valley, hills of greater height run parallel to the limestone, consisting of a red sandstone and conglomerate; and a range of heights on the east of it is composed of trap rocks. The basis of a tract, still further eastward, which divides the waters of the interior from that which sends its streams to the sea, is granite. The rugged surface of the limestone tract, in several parts of which the bare rocks are exposed, appears to abound in cavities, the orifices of caves and fissures; two of which, the more immediate subject of this communication, are about eighty feet above the stream of the Bell, on its eastern side; the first being a cave about 300 feet in extent; the second apparently a wide fissure in the limestone, partially filled up. The cave agrees in structure with many of those well known from the descriptions of Dr. Buckland and other writers: it descends, at first, with a moderate inclination; and about 125 feet from the mouth, the floor is thickly covered with a fine dry reddish dust, in which a few fragments of bones, apparently of kangaroos, occur. The cavern, in different places, affords beautiful stalactites and stalagmitic incrustations. Irregular cavities in the roof seem to lead towards the surface of the hill; and at the remotest part, the floor is covered with a heap of dry white dust, so loose and light, that one of the exploring party sunk into it up to the waist. This dust, when chemically examined by Dr. Turner, was found to consist principally of carbonate of lime, with some phosphate of lime and animal matter. In fine, the cave appeared to terminate in a fissure nearly vertical, with water at its bottom, about thirty feet below the lowest part of the cavern, and nearly on a level with the waters of the river Bell. This fissure also extends upwards towards the surface.

"About eighty feet to the west of the cave above described, is the mouth of another cavity of a different description, first examined by Mr. Rankin. At this place, the surface itself consists of a breccia, full of fragments of bones; and a similar compound, confusedly mixed with large rude blocks of limestone, forms the sides of the cavity, which is a nearly vertical, wide, and irregular sort of well, accessible only by the aid of ladders and ropes. This breccia con-

sists of an earthy red calcareous stone, having small fragments of the grey limestone of the valley dispersed through it, and in some parts, possesses considerable hardness. Near the lower part of the fissure (the whole extent of which was not explored,) were three layers of stalagmitic concretion, about two inches in thickness and three inches apart, the spaces being occupied with a red ochreous matter, with bones in abundance, imbedded both in stalagmite, and between the layers of it.

"The bones found in the fissure just described, of which specimens have been sent to England, belong, with only two exceptions, to animals at present known to exist in the adjacent country; and their dimensions also are very nearly the same with those of the existing quadrupeds. The species, from the report of Mr. Cliff, to whose examination the bones were submitted, appear to be as follow:—kangaroo, wombat, dasyurus, koala, phalangista—the most abundant being those of the kangaroo. Along with the remains just mentioned were found two bones, not agreeing with those of any of the animals at present known to exist in New South Wales. The first and larger is supposed to belong to the elephant: the second bone is also obscure and imperfect, but seems to be a part of one of the superior maxillary bones of an animal resembling the Dugong; it contains a portion of a straight tusk, pointing directly forward."

A pit was dug, by sir T. Mitchell's direction, in the surface of the ground, about twenty-five feet from the mouth of the fissure, at a place where no rocks projected; and the hill was there found to be composed of a hard and compact breccia, such as that before described, and likewise abounding in organic remains. Other caverns, containing a similar breccia, occur in the limestone on the north bank of the Macquarie, eight miles north-east of those at Wellington; and about fifty miles to the south-east at Buree, are several caves like the first described above, which communicate with fissures partially occupied with breccia containing bones. At Molong, thirty-six miles to the east of Wellington, a small quantity of concreted matter has been found, containing numerous bones, of which no specimens have been sent to Europe; but, from their size, they would appear to have belonged to species of animals or birds larger than those which are at present known in the country.

The specimens of rocks collected by captain King and Mr. Browne at different parts of the Australian coast line have been locally classified as follows:—

Granite.—Cape Cleveland; Cape Grafton; Endeavour River; Lizard Island; Round Hill, near Cape Grindall; Mount Caledon; Island, near Cape Arnhem; Melville Bay; Bald-Head, King George's Sound.

Various Slaty Rocks.—*Mica Slate*, Mallison's Island. *Talc Slate*, Endeavour River. *Slaty Clay* Inglis's Island, Crack Island,

Percy Island. *Horneblende Rock*, Pobassoo's Island, Half-way Bay, Prince Regent's River. *Granular Quartz*, Endeavour River, Montagu Sound, north-west coast. *Epidote*, Cape Clinton, Port Warrender, Careening Bay. *Quartzose Conglomerates and Ancient Sandstones*, Rod's Bay, Islands of the north and north-west coasts, Cambridge Gulf, York Sound, Prince Regent's River. *Pipe Clay*, Melville Bay, Goulbourn Island, Lethbridge Bay.

Rocks of the Trap Formation.—*Serpentine*, Port Macquarie, Percy Isles. *Sienite*, Rod's Bay. *Porphyry*, Cape Cleveland. *Porphyritic Conglomerate*, Cape Clinton, Percy Isles, Good's Island. *Compact Felspar*, Percy Isle, Repulse Bay, Sunday Island. *Greenstone*, Vansittart Bay, Bat Island, Careening Bay, Malu's Isle. *Clinkstone*, Morgan's Island, Pobassoo's Island. *Amygdaloid, with Chalcedony*, Port Warrender, Half-way Bay, Bat Island, Malu's Island. *Wacke*, Bat Island. *Recent Calcareous Breccia*, Sweer's Island, north coast; Dirk Hartog's and Rottnest Island, &c., west coast; King George's Sound, south coast. *Limestone, resembling, in the character of its organic remains, Mountain Limestone of England*, Interior of Australia, near the east coast.

The Coal Formation, as yet discovered, applicable for domestic or steam purposes, is confined chiefly to the east coast of Australia.

Not the least remarkable circumstance connected with Australia is the contrast its geological features present, when compared with the apparently volcanic islands in the adjacent Coral and Arafura seas. The line of islands between Cape York and Mount Cornwallis are all granite, or old metamorphic rocks, and those lying between that line and the volcanic islands of Erroob and Murray group, are all flat coral islands.

On the north-west coast of Australia the predominant geological feature is red sandstone, while at the island of Timor the little rocky headlands on the coast expose beds of coral and limestone, full of corals and shells apparently of recent formation. This limestone appears to constitute the whole surface of the island, spreading over all the adjacent high lands, at an elevation of 2,000 feet, giving them rather a smooth and level outline.

The rocky islands in the central north and south bend of Torres Strait are, in some instances, inhabited, but only those within thirty or more miles from the coast have cocoa-nut trees on them.

Diversity of surface and aspect produces, in Australia, diversity in appearance. Forest timber, brushwood, and grasses are not divided into zones, as in other countries, according to their elevation; the nature of the soil and the proximity of water seems to determine the class of productions, irrespective of latitude or altitude. In many places, the whole face of the country has the appearance of a landscape garden—a grove here, a lawn there—beyond a shrubbery, or clump of trees, and frequently a natural wall of a light-coloured stone, scarcely to be detected from good masonry, and appearing through the foliage like the enclosure of a parterre. The interior explorers found these apparent “pleasure grounds” of various sizes, suited to the humble cottage or the princely mansion. Even in my own limited experience of these strange regions, I have felt it difficult to realize the fact, that so far from having been adorned by the hand of civilized man, they were untrodden, save by the foot of the wandering savage.

The geology and natural vegetation of Australia, like those of other countries, appear to be intimately connected. In the districts with which we are best acquainted, the rock which forms the basis of the country, may be known from the kind of tree or herbage that flourishes on the soil above. For instance, the *eucalyptus pulv.*, a dwarfish tree, with glaucous-coloured leaves, growing mostly in scrub, indicates the sandstone formation; while those open, grassy, and park-like tracts, affording good pasturage, and thinly interspersed with the *eucalyptus mannifera*, characterize the secondary ranges of granite and porphyry: the limestone formation has on its superincumbent soil trees of lofty growth and vast size, while large umbrageous shrubs, the *cupressus callitris* and *casuarina*, occupy sandy ridges. From many facts adduced by the observant captain Sturt, it may be inferred that the trees are gregarious, and that the strong line that occasionally separates different species, and the sudden manner in which several species are lost at one point, to reappear at another more distant, may be ascribed to the geological strata of the country. It is, however, impossible to determine accurately the extent to which the peculiar geological structure of Australia influences the character of its productions: but it is a singular fact, that the vegetation of the north, or tropical coasts, differs totally from that of the adjacent islands. Cocoa-nut trees are nowhere to be

found in Australia, while at Murray's island, within the great Barrier reef, which is about 700 feet high at its most elevated part, with steep broken ground, the whole of its lower portion, and even a considerable part of the hills, are covered with groves of cocoa-nut trees. Mr. Jukes remarks, that at the island of Timor, where the difference of latitude is not more than forty miles from Port Essington, in North Australia, and the actual distance not 250 miles, the difference in the appearance of the vegetation is as great as one would expect between two countries lying under different zones. The gum trees (*eucalypti*) which line the shores of Australia, to 11° N. lat., are not found in New Guinea, or in the islands of the Eastern Archipelago.

Taking Endeavour Strait, Cape York, and Mount Adolphus as a base, all the islands which stretch across the Strait to the northward of them, have one common character. They are all steep and rocky, many of them 400 to 500 feet high. The rocks of the main land of the adjacent islands are all porphyritic; and Mr. Jukes considers these islands as, in fact, merely the submarine prolongation of the great mountain chain of the eastern coast of Australia, and remarks, that in Torres Strait the line of demarcation is almost equally strong and precise between two groups of vegetation and two groups of the lower order of animals, as between two varieties of the human race. A sombre vegetation spreads all over Cape York and the immediately adjacent islands, of which wide forests of large but ragged-stemmed gum-trees, with almost leafless branches, are the chief characteristic.

Here and there, says Mr. Jukes, speaking of the north coast, are gullies with more umbrageous foliage, and some palms, but the mass of the woods are arid, hot, and dusty, the leaves not only small but dry and brittle, and the marks of frequent fires everywhere apparent in calcined rocks, blackened stems and fallen trunks. The contrast with this northern coast of Australia and the islands on the northern side of Torres Straits, is certainly very great; there, not a gum tree is to be seen; the woods are close, lofty, and afford deep and refreshing shade, often matted into impenetrable thickets by creepers and undergrowth, but adorned with varied foliage, with the cocoa-nut, the plantain, and other trees and shrubs useful to man. On the New Guinea coast, the vegetation is extraordinarily luxuriant, even for the tropics. There is also a difference in

the shells and echinodermata, collected about Cape York and those obtained near Erroob or Darnley Island on the coast opposite to North Australia. In the mineral, the vegetable, and the animal kingdoms, and even in the human race (as will be shown in a subsequent chapter), the territories on each side of the narrow strait of Torres, present totally different aspects, which can scarcely be assigned to distinct geological formations; but it must be admitted that the sandstone strata which constitutes such a large portion of northern and north-western Australia, must have considerable influence in giving the peculiar dryness perceptible in Australia, where, as has been truly observed, every thing absorbs heat freely, and radiates it into the surrounding atmosphere; the sea air, instead of being cooled and precipitated in refreshing moisture, has its temperature raised, and becomes an absorbent of any moisture on the surface, for the open and scattered woodlands, with their small, thinly disseminated leaves, instead of protecting the soil from the parching effects of a vertical sun, become conductors of heat, and are ever ready to catch fire from the slightest spark. Captain Sturt experienced, in November, 1845, a severe gale of *hot* wind, in the parallel of 27° , and about the meridian of 140° . The withering effects of this gale, which was from the *north-east*, were terrific. Everything, animate and inanimate, gave way before it; the birds were mute, the leaves fell from the trees like a snow shower; the horses stood with their backs to the wind, and their noses to the ground, without the muscular strength to raise their heads. A thermometer graduated to 127° , after rising to 125° burst the bulb, by the expansion of the mercury. The air during the summer, in this region, had a temperature from 110° to 123° Fah.; the wind blowing heavily from N.E. to E.S.E., filled the air with impalpable red dust; the ground was so heated, that matches falling on it ignited, and rockets, on being lit, exploded at once without rising from the ground. The atmosphere, on some occasions, was so rarified, that captain Sturt and his party "felt a difficulty in breathing, and a buzzing sensation on the crown of the head, as if a hot iron had been there." On two occasions the thermometer was noticed to exceed the range of 130° Fah. *in the shade*, "the solar intensity, at the same time, being

nearly 160° ." At the depôt of captain Sturt, in lat. $29^{\circ} 40'$, from December, 1844, to the end of April, 1845, the prevailing winds were from E.N.E. to E.S.E.; after that month they were variable, but west winds predominated. The south wind was always cold, and invariably indicated by a rise of the barometer, which did not ascend above 30.260, or fall below 29.540: rain usually commenced in the north-east quarter, and gradually went round to the north-west. The sky, generally speaking, was without a speck, and the dazzling brightness of the moon was most distressing; it was impossible to shut out its light; and its irritating effects were very remarkable. At the depôt, the fleece of the sheep taken by the explorers into the interior ceased to grow, as did also the hair and nails of captain Sturt and his party. These facts, and the scanty vegetation, indicate the excessive dryness of this portion of central Australia, arising not only from the solar rays, but also by the terrestrial emission of heat from proximate volcanic fires. It is probable, also, that very little rain reaches the centre of Australia; on the north coast the rainy monsoons are greatly mitigated by the mountainous islands of the Eastern archipelago; on the north-east coast the lofty coast ridge of four to five thousand feet elevation intercepts the showers from the Southern Ocean; the Australian Alps, in the south-east, are the means of diffusing a large quantity of moisture over the adjacent region, but the comparatively lower elevation of the coast range of Western Australia permits a greater diffusion of rain and dew towards the interior. The presumed absence of any large mountains in the centre of Australia, the great distance of that centre from the ocean, the sandy formation of the country, and the saline qualities of the soil, all contribute to the belief that the interior of this insulated continent will not eventually be found available for the support of civilised man. But making large allowances for the barren central region, and for the sandstone wastes in other places, there probably is not less than two million square miles capable of yielding in abundance the productions of the temperate and of the torrid zones, and where horned cattle and sheep may be multiplied to an extent that would furnish all the inhabitants of Europe with animal food.

BOOK II.—NEW SOUTH WALES.

CHAPTER I.

ORIGIN OF TRANSPORTATION—EARLY SETTLEMENT AND HISTORY—CONVICT DISCIPLINE, AND RELIGIOUS REFORMATION—GRANT AND SALE OF CROWN LANDS—EFFECTS OF HIGH PRICES OF LAND—LIST OF GOVERNORS.

THE original settlement and early history of New South Wales, occupies one of the most interesting pages in the annals of British colonization. The formation of a convict settlement at the Antipodes, must have been a startling proposition, and the motives which actuated the government of the day in taking so bold a step, in a matter in which their conduct was naturally watched by the public with jealous scrutiny, can scarcely be rightly understood without some knowledge of the system of transportation previously pursued.

The causes which first necessitated the adoption of this punishment in England, in its primary form of simple banishment, may perhaps be traced to the immense increase of pauperism which followed the confiscation of church property and the extinction of monastic institutions in the reign of Henry VIII., and the absence of any efficient measures for the relief of the poor, or for the suppression of crime, which augmented so fearfully as to threaten the destruction of the very frame-work of society. An act of parliament in this reign, asserts that there were then no less than 60,000 prisoners (or about one out of every fifteen of all the males arrived at manhood) confined in the different gaols of England, and Hume appears disposed to believe that 72,000 of King Henry's subjects suffered death during the thirty-seven years of his sovereignty. In the reigns of his successors, Edward VI., Mary, and Elizabeth, various expedients were resorted to by the legislature, to check the growing progress of poverty and crime, one of which was an enactment for the raising of poor rates, (5 Eliz. c. 3), afterwards more fully carried out in a subsequent act (43 Eliz. c. 2.), and another very important measure was the first decree by which banishment from the kingdom was ordained as the punishment of rogues and vagabonds. In this act,

passed in the 39th year of the reign of Queen Elizabeth, the place of exile is not named.

In 1619, during the reign of James I., the practice of transporting convicts to America commenced, criminals being also in many instances allowed to transport themselves. An act of parliament (18 Charles II. c. 3.), empowered the judges to exile for life "the moss troopers of Cumberland and Northumberland" to any of His Majesty's possessions in America.

In 1717 an act of parliament was passed, (4 Geo. II. c. 11.), which recited the inefficiency of the general punishments then in use, and stated that, "in many of His Majesty's colonies and plantations in America, there was a great want of servants, who, by their labour and industry might be the means of improving and making the said colonies and plantations more useful to this nation." Under this act the prerogative of the crown to pardon was restricted by requiring as a condition, that before a convict who had once been assigned to a planter could avail himself of it, he should make compensation to his master for the loss of his services.

By virtue of this enactment, a shameful course of conduct was adopted in the disposal of the wretched prisoners, who were in fact sold into slavery at the average rate of twenty pounds per head; the numbers transported being about 2,000 per annum. The separation of the United States from England, put an end to this system, and the prisons becoming crowded, various expedients were suggested and resorted to for the relief of the country; among others that of conveying convicts to the west coast of Africa, there, according to the either ignorant or wantonly cruel proposition of some persons, to be turned loose among the unhappy negroes; the building of large penitentiaries was also strongly advocated; but

both these plans were abandoned, the one on account of the unhealthiness of the climate, the other by reason of the expense attending it, and its inefficiency in reclaiming offenders, to whose condition, Howard, and other christian philanthropists had strongly directed the attention of the nation.

At this critical juncture of affairs, the favourable description given by captain Cook of that part of New Holland which he had discovered and named New South Wales, determined the government to attempt the formation of a penal settlement at Botany Bay (so called by Sir Joseph Banks when there), as a means of attaining the following desirable ends:—1st. To rid the mother country of the yearly increasing number of prisoners who were accumulating in the gaols; 2nd. To afford a proper place for the safe custody and punishment of the criminals, as well as for their progressive and ultimate reformation; and, 3rd. To form a free colony out of the materials which the reformed prisoners would supply, in addition to families of free emigrants who might settle in the country from time to time.

In the twenty-fourth year of the reign of George III., an act of parliament was passed, which empowered his Majesty in Council to appoint to what place beyond the seas, either within or without his Majesty's dominions, offenders should be transported; and by two orders in Council, dated 6th December, 1786, the eastern coast of Australia, and the adjacent islands, were fixed upon as the places of banishment.

The small fleet destined for the conveyance of the exiles, consisting of the *Sirius* (a frigate), the *Supply* (an armed tender), three store ships, and six transports, assembled at the Isle of Wight, having on board 565 male, and 192 female convicts, with a guard, consisting of a major-commandant, three captains, twelve subalterns, twenty-four non-commissioned officers, and 168 privates, all of the royal marines, together with forty of the marines' wives and their children, and provisions and stores for two years. Captain Arthur Phillip, R.N., an experienced officer, was appointed governor of the projected colony, and commander of the expedition, which left the shores of England on the 13th of May, 1787, touched for supplies and stock at Teneriffe, Rio de Janeiro, and the Cape of Good Hope, and arrived, in safety, at Botany Bay, in January, 1788, after a voyage of upwards of eight

months, of which, however, four weeks were spent at the Cape of Good Hope.

On landing, governor Phillip was received by an armed body of the natives, but on seeing him approach, alone and without any weapon, they returned his confidence by laying down their own, and receiving him in a very friendly manner. On proceeding to examine the bay, he soon found, that though extensive, it was ill-adapted for the foundation of a large settlement, being open to the full sweep of the easterly winds, which rolled a tremendous sea on the beach, and the greater portion of the land, moreover, though delightful for botanizing, was found to be little better than a series of swamps and sterile sand, very badly supplied with water. Little suspecting the close vicinity of one of the finest harbours in the world, captain Phillip resolved to examine what captain Cook had termed Broken Bay, where the Hawkesbury disembogues; but, on his way thither, he stopped to investigate an inlet, marked in the chart as a boat harbour, to which (appearing of little importance) captain Cook had given the name of Port Jackson, from the seaman on the look-out, by whom it was descried. On passing the lofty headlands which form the entrance of this "boat harbour," the astonishment of the governor may be conceived, when he found himself in a haven in which the whole of the British navy might securely ride at anchor, navigable for vessels of any burthen fifteen miles from its mouth, indented with numerous coves, and sheltered from every wind. Thither the fleet was immediately removed; and, on the 26th of January, 1788, the British flag was hoisted on the shores of Sydney cove, then thinly wooded, and abounding in kangaroos. The silence and solitude of the forest were soon broken by the resounding stroke of the woodman's axe; the ground was cleared, tents pitched, the live stock (consisting of one bull, four cows, one bull-calf, one stallion, three mares, and three colts) landed, stores deposited, and the little colony (numbering 1,030 souls) established. Farms were laid out at Rose Hill (Parramatta) and other places; every encouragement was given to raise the means of sustenance from the soil, and a few convicts were emancipated, and obtained grants of lands as settlers. The governor having also received orders to form a settlement at Norfolk Island, with a view to the cultivation of the flax plant, which captain Cook had found growing there most

luxuriantly, the *Supply* sailed for that place in February, (1788) with lieutenant King as superintendent, accompanied by one surgeon, one petty officer, two private soldiers, two persons supposed to have some knowledge of flax dressing, and nine male and six female convicts with tents, implements for husbandry, tools for dressing flax, and provisions for six months. The *Supply* on its return to Port Jackson, (having been absent five weeks and two days) reported the extreme difficulty found in landing on Norfolk Island, and the unfortunate loss of five lives thereby, but brought most favourable accounts of the richness of the soil and salubrity of the climate. Meanwhile great and increasing difficulties were experienced by the infant colony at Sydney Cove, the scurvy broke out among the convicts, and resisted every attempt made to check its progress by medicine, while the evil tendencies of their minds, repressed in some degree during the voyage, and their rooted habits of idleness, became daily more manifest.

Among the numerous disappointments which the governor, notwithstanding the most strenuous exertions was doomed to experience, not the least was the frustration of his hopes of maintaining a friendly intercourse with the natives. M. de la Pérouse, (see p. 367) while he remained in Botany Bay, had some quarrel with the natives, in which he was unfortunately obliged to use his fire arms, and this affair, together with the ill behaviour of some of the convicts, who, in spite of all prohibitions had wandered among them, produced a shyness on the part of the aborigines which resulted in open enmity. The soil around Sydney Cove was found to be extremely sterile, so that the possibility of immediately raising sufficient grain for the settlement was out of the question, the cattle were lost through the neglect of the person in charge; while the conduct of the prisoners was too often very detrimental to the public weal, theft being general, and desertion into the woods not unfrequent. At one time forty persons were absent from the settlement *on their road to China!* These travellers consisted principally of Irish convicts, who being possessed with the idea that China was not far distant to the northward, were always making up parties for the purpose of decamping thither. Most of the wanderers perished of hunger, or were speared, and probably eaten by the natives. An anecdote is told of one who, after traversing the

woods near Sydney for several weeks, endeavouring to find the road to China, had not only lost his way, but, as is often the case when the traveller is bewildered in a forest, lost also his senses. As good luck would have it, Pat, almost famishing, reached what he thought a Chinese town; instinct drew him towards one bark hut in particular, which he cautiously approached, and was most agreeably astonished to find his wife, whom he joyously hailed with, "Oh! Judy dear, how did *you* find your way to China?" The number of natives who then resorted to the shores of Port Jackson to fish or hunt was considerable, and hostilities soon commenced between them and the new comers, in the course of which many cruelties on both sides were committed.

The *Sirius*, which had been despatched to the Cape of Good Hope for flour, returned in May, 1789, and although the supply she brought was not very large, as the ordinary rations of four months would exhaust it, yet it seemed to gladden every heart, and remove for a time the despondency which was rapidly gaining ground.

On the 4th of June, 1789, the second anniversary of his Majesty's birthday commemorated in this country, the governor endeavoured, as he had done on the previous occasion, to foster a loyal spirit by making it a day of rejoicing, and the convicts were permitted to perform Farquhar's comedy, "the Recruiting Officer;" the prologue spoken on the occasion contained a pertinent allusion to their own position in the words,

"True patriots we, for be it understood,

We left our country for our country's good."

In spite, however, of every effort to disguise or meet them, difficulties increased at Sydney, and the accounts from Norfolk Island continuing favourable, it was thought advisable to divide the colony. In February, 1790, a large body of convicts (above 200) together with two companies of marines, were ordered thither, on board the *Sirius* and the *Supply*. A serious evil, the injurious consequences of which were long felt in the colony, attended this measure. It being found that stock was improvidently killed, an order was given to prevent the further destruction of an article so essential in the present state of affairs, (the government rations having been thrice reduced since the beginning of November) until some necessary regulations could be published; but the officers and people who were about to embark were not included in this

prohibition. The mention of *future necessary regulations*, gave rise to an opinion among the convicts that on the departure of the ships, all the live stock in the colony would be called in, or that the owners would be deprived of the benefits which might result from its possession, and, under the pretence of its belonging to those who were exempted by the late order, nearly all the stock in the settlement was destroyed in the course of a few nights.

Another heavy disaster resulted from this unfortunate expedition, for the *Sirius*, which on its return was immediately to have proceeded to China for supplies, was lost with all the provisions which had been sent with the convicts, upon a reef at Norfolk Island; her officers, crew, and convicts were however all saved, having been dragged on shore, through the surf, on a grating. Owing to the increase of population without any corresponding augmentation of provisions, the inhabitants of Norfolk Island were on the eve of perishing, but for the unexpected relief afforded by a flight of aquatic birds which alighted on the island, to lay their eggs. Owing to the length of their pinions, these birds take wing with difficulty; and their numbers were so great, that for two months the settlers caught at least from 2,000 to 3,000 every night, and also procured an incalculable quantity of eggs; thus these "*birds of Providence*" saved the lives of the people.

To return to the principal settlement. The long-looked for ships from England did not arrive, and the necessity for procuring succour becoming daily more urgent, on the 17th of April, 1790, the *Supply* was sent to seek relief from Batavia. On the 20th of April the miserable ration issued from the public store to each man for seven days, was—flour, 2½ lbs.; rice, 2 lbs.; pork, 2 lbs.; and of this sadly insufficient ration, the pork, from the length of time that it had been in store, had shrunk away to nearly nothing. The manly and unselfish conduct of the governor had been throughout remarkable, but it was especially manifested during this season of severe trial; he gave up three hundred weight of flour which was his private property, declaring, that although it was not in his power to remove the want felt by the convicts, they might at least know that it was equally experienced even at the government house; and to this resolution he rigidly adhered. Every exertion was made to procure food by hunting and fishing; but, from the former pursuit, little benefit resulted,

only three small kangaroos being brought in at the end of a month by the persons employed to shoot for the settlement; and the food obtained from the latter was not often more than equal to supplying the people employed in the boats with one pound of fish per man, which was allowed them in addition to their ration. Even this scanty resource seemed likely to fail them in their greatest need; for on the first and second days of June, (their seasons, be it recollected, being exactly opposite to ours,) the stormy weather prevented fishing, and threatened to continue throughout the third day. The wretched people seemed destined to drink to the dregs the bitter cup of hope deferred.

They had long, and, as the event proved, rightly conjectured, that the non-arrival of supplies could not be owing to the wilful neglect of the home government, but must be consequent upon some unforeseen delay or fatal accident. Their worst fears received a speedy confirmation. On the afternoon of the 3rd of June, the long-looked-for signal was made for a ship at the South Head, which proved to be the *Lady Juliana* transport from Plymouth, not bearing the much-desired cargo of provisions, but laden, in its place, with 220 female convicts, and bringing to the unfortunate colonists intelligence of the loss of the store ship sent by government for their assistance. The *Guardian*, a forty-four gun ship, commanded by lieutenant Riou, had sailed from England in September, 1789, richly freighted with two years' provisions for the settlement, and an immense variety of all manner of stores. She had reached the Cape of Good Hope in safety, had there taken on board a quantity of stock for the settlement, and completed a garden, which had been prepared under the immediate inspection of Sir Joseph Banks, and contained 150 of the finest fruit trees. Leaving the Cape, the *Guardian* proceeded on her way; but on the 23rd of December she struck upon an iceberg in 45° 54' S. lat., 41° 30' E. long., and thereby received so much injury, that lieutenant Riou, to save her from instantly sinking, was compelled to throw overboard the greatest part of her valuable cargo. The stock was killed, the garden destroyed, and most of the passengers and crew left her, in five boats, four of which were never afterwards heard of; the fifth, with much difficulty, reached the Mauritius. Lieutenant Riou remained behind, resolved to sink with his vessel; but it was

otherwise ordained; and his life, preserved for a time, was eventually sacrificed for his country at Copenhagen, and the *Guardian*, with the loss of masts and rudder, after having been tossed about for several days, at the mercy of every gale, was fallen in with by a French frigate, near the Cape of Good Hope, and towed into Table Bay, where such of her stores as yet remained were landed.

In addition to the above disastrous tidings, the disappointed colonists were informed that 1,000 convicts might be shortly expected, and little benefit even of a temporary nature was consequent upon the arrival of the *Juliana*, the supply of provisions on board her being so inconsiderable as to justify only the addition of one pound and a half of flour being made to the weekly ration. A deep gloom, enhanced by the frustration of their hopes, when they were apparently on the eve of realization, overspread every countenance; but effectual relief was near at hand, on the 20th of the same month the *Justinia* arrived from England with a large cargo of provisions and stores. A few days after three transports, laden with the convicts whose coming had been announced by the *Juliana*, reached Port Jackson; 274 of these unhappy people had perished during the voyage, and disease was so rife among them that, according to lieutenant-colonel Collins, several of them died in the boats as they were being rowed to shore, or on the wharf as they were lifted out of the boats; both the living and the dead exhibited more horrid spectacles than had ever been witnessed in that country. Apart from the distressing state of the criminals themselves, the arrival of the transports was in other respects beneficial; for in addition to the provisions brought by them from England, were 400 tierces of beef, and 200 tierces of pork, saved from the *Guardian*, and put on board at the Cape of Good Hope, and all anxiety respecting the stores was subsequently set at rest by the adoption of a more regular system in the forwarding of supplies. The aspect of affairs began to brighten, the lines for a regular town were laid out, various public buildings commenced, and the non-commissioned officers and privates of the marines were encouraged in becoming settlers by grants of land. In September, 1791, H.M.S. *Gorgon* arrived at Sydney, convoying ten vessels, which formed what is termed the second fleet, the whole containing 1,695 male and 168 female convicts; upwards of 200 having died

during the voyage. In the December of the following year, governor Phillip, whose health was seriously impaired, left the colony which for nearly five years he had superintended with untiring zeal. To the firm but merciful and just policy which he consistently maintained, notwithstanding the varied difficulties of a most arduous position, may be attributed, under Providence, the successful issue of the infant settlement from the trials which so frequently threatened its destruction.

After the departure of governor Phillip, captain Grose administered the affairs of the colony, as lieutenant-governor, until the arrival of the new governor-general, captain Hunter, in September, 1795, who, it will be remembered, had previously commanded the *Sirius* frigate, when the settlement was first formed. Governor Hunter appears to have been an honest straight-forward sailor; his administration lasted five years, during which period the colony made considerable progress. Settlers occasionally arrived from England, and the accession of a regiment called the "New South Wales Corps" (afterwards the 102nd of the line) was beneficial in many respects.

The officers of this corps were much blamed by a portion of the population for engaging in mercantile pursuits instead of confining themselves strictly to the duties of their profession. In this censure Dr. Lang unites, but he appears to overlook the peculiar circumstances in which these gentlemen were placed, having nothing but their pay and convict rations to rely on for the support of themselves and their families. The price of provisions was at that period very high, wheat being 12s. a bushel, mutton 2s. a pound; a cow fetching £80, and so on in proportion. (See *Collin's Account of New South Wales*, p. 333.) This state of things compelled them to import their own supplies, and rear their own stock, and it was fortunate for the colony that they were enabled to do so. The total number of inhabitants, free and bond, was, on captain Hunter's departure in September, 1800, about 8,000; of these about 2,500 were stationed at Sydney, and the remainder at the agricultural establishments at Parramatta, Prospect, Toongabbee, and Castlehill. Captain King, R.N., who as lieutenant of the *Sirius*, had effected the settlement on Norfolk Island, was appointed to succeed Captain Hunter: his administration lasted for six years, and was distinguished by what is termed the

"Irish rebellion." Several hundred convicts, attached to the establishment at Castle-hill, twenty miles from Sydney, struck for their liberty; but being armed only with pikes, were, after a very brief contest, discomfited by the military at Vinegar Hill, a few miles from Parramatta, on the Hawkesbury road; a few were shot by the troops, some of the leaders taken and hanged immediately, and the rest returned quietly to their labour. This is the only instance of an insurrection of the convict population since the foundation of the settlement.

Governor King met with much opposition, and though zealous and conscientious, does not seem to have been adequate to the magnitude of his trust. A circumstance is said to have occurred during his tenure of office very characteristic of the then predominating genius of Botany Bay. Charges of a serious nature having been preferred against a gentleman in the colony, despatches relating thereto were prepared, to be forwarded to the secretary of state in England, but, the officer who had charge of them imprudently mentioned their contents, and the box when opened in due form in Downing-street, was found to contain only a bundle of newspapers, the criminating despatches having been adroitly abstracted from it before leaving Sydney. Captain Bligh, whose name is handed down with infamy to posterity, by reason of his tyrannical treatment of Christian and his comrades in H.M.S. *Bounty*, when sent to convey the bread fruit tree from the South Sea islands to the West Indies, was appointed to succeed captain King. The selection was singularly ill-judged, for a man who, notwithstanding his undoubted skill as a mariner, had shown himself incapable of governing a small ship's company, was clearly unfit to be trusted with arbitrary power in New South Wales, Captain Bligh's conduct there was only too much in accordance with his previous life. The former results of his tyrannical proceedings, appear to have utterly failed in teaching him either the duty or expediency of pursuing a different course of policy, for on entering his new position he behaved towards the whole population as if it had been entirely composed of criminals with abject minds; treated the officers of the New South Wales corps and the most respectable settlers with marked contempt, and was the first to trample under foot the rights which it was his especial duty to uphold. One individual in particular experienced from the governor an unwarrantable

series of persecutions. This gentleman, Mr. John M'Arthur, had obtained the name of the "Father of the Colony," and well did he deserve the appellation for the untiring zeal with which he strove to augment the resources, and raise the position of the land he had chosen for his home, stimulating the dormant energies of those about him by his own example, and aiding the poor by wealth honourably acquired during a long and extraordinarily active life. The oppressive and unjust sway of governor Bligh was endured by the colonists for eighteen months, but at length it became intolerable, and on the 26th of January, 1808, they rose with one accord, and, as with a single voice, having declared his deposition, vested the supreme authority in the hands of lieutenant-colonel Johnstone, the senior officer in command of the troops. The arrest of the governor having been resolved upon, the soldiers marched up to the Government House, with their officers at their head, to arrest the governor, who after a long search was discovered concealed under a servant's bed, in an upper chamber, covered with flue, and trembling with apprehension. Like most tyrants he was entirely devoid of moral courage, and it was a considerable time before he could be convinced that his life was in safety from the vengeance of the populace. Both his person and property were, however, carefully guarded, and after some time he embarked for England on board the *Porpoise* sloop of war.

From this period naval officers were no longer selected as governors. Lieutenant-colonel (afterwards major-general) Lachlan Macquarie was next appointed. The New South Wales regiment was ordered to England, and the regular troops of the line placed on the "roster" for service in the colony. During governor Macquarie's administration of twelve years, the settlement made great progress; the population was increased by numerous convicts and some emigrants, and by the aid of a *carte blanche* on the British treasury, many public buildings were erected—roads constructed—the fine Bathurst country over the Blue Mountains explored, and several government farms established. The convict population received great encouragement from general Macquarie; his maxim being to endeavour to induce every convict to consider his European life as a past existence, and his Australian one an entirely new, in which career he would find honesty to be the best policy,

and good conduct ensure its reward. This was his grand principle of government; but, like most men, strongly imbued with a favourite view, it sometimes led him too far. The emancipated convicts received from him an undue share of patronage—some he made magistrates, gave others colonial situations, and distributed among them large quantities of land. Truly philanthropic as were the motives which dictated his conduct, there yet appears reason to regret that governor Macquarie did not exercise more discrimination in his choice of individuals deserving of encouragement, and greater consideration for the feelings or prejudices of the free settlers, from whom he could not reasonably expect an entire appreciation of his own views; and from hence is said to have arisen the formation of two parties in the colony—the *exclusionists* and the *emancipists*, (or freed convicts,) who continued for many years engaged in active opposition to each other.

Major-general Sir Thomas Brisbane, who succeeded governor Macquarie in 1821, was an amiable and scientific man, but deficient in energy of character; his successor, lieutenant-general Sir Ralph Darling, possessed considerable ability, and strongly desired to benefit the colony; but his long employment at the "Horse-Guards," (a school well fitted for the inculcation of military discipline, but ill-calculated to prepare the mind to grapple successfully with the heterogeneous elements of which the society of New South Wales was composed,) and his previous government of a slave colony (the Mauritius), did not tend to qualify him for the exercise of the peculiar authority then vested in the governors of this semi-penal settlement. Intimate and personal knowledge of general Darling, both in his public and private capacity, seems to entitle me to bear testimony to his administrative abilities—to his remarkable aptitude for the despatch of public business, and high integrity of character. When officially employed in the colonial secretary's office at Sydney, and confidentially entrusted by the excellent secretary of the colony, the honourable Alexander M'Leay, with the drafting of the governor's despatches and letters, I had frequent opportunities of scrutinizing the motives which actuated the conduct of the governor, then violently attacked and maligned. From the example of lady Darling great benefit resulted. In conjunction with the governor and her family, she attended divine service

twice on every sabbath—that sacred day being, for the first time in the annals of the colony, duly observed at the government house; and in the charitable institutions which she set on foot, as well as the influence she exercised on the social habits and domestic peace of the colony, were forcibly illustrated how much both the present and prospective happiness of a community may be promoted by the righteous conduct of those set in high places.

The administration of the subsequent governors—major-general Sir R. Bourke, Sir George Gipps, and Sir Charles Augustus Fitzroy, does not require any particular mention. As is the case in all colonies, during the period of their passing from individual to constitutional rule, their governors had many difficulties to contend with, which, however, have been surmounted with remarkable success. The first step of a Legislative Council, partly nominated by the crown, and partly elective, was taken in the year 1840. That measure proved eminently successful, and has prepared the colonists for an elective House of Assembly, which is now about being granted by the crown and imperial legislature.

The colony has passed through periods of alternate prosperity and depression, in some instances arising from long-continued droughts, and in others from the too great speculation, consequent on the rapid acquisition of wealth. During a recent season of distress, sheep, the staple property of the colonists, were reduced to the price of two shillings and sixpence each, and every other commodity, or representative of value, was proportionably depreciated. Large quantities of sheep and horned cattle were boiled down merely for the sake of the tallow thus produced, and a new and lucrative article of export was thus created.

The colonists are now slowly recovering from four years of continued adversity; and, grown wiser by experience, they will not, it is to be hoped, again rush into foolish speculations, or engage in ruinous projects; at least, for some years to come, their enterprise and exertions are most likely to be characterized by prudence. But whether suffering from unpropitious seasons, or from the consequences of their own imprudence; or elated by riches and rapid progress, the colonists of New South Wales have, from the first, evinced a loyal attachment to the parent state—an ardent desire to participate in its glories, and an anxious wish to be

deemed worthy of the possession of those free and christian privileges which it is in the power of the crown and legislature of Britain to grant.

TRANSPORTATION, CONVICT DISCIPLINE, RELIGIOUS INSTRUCTION, AND REFORMATION OF CRIME.—This highly important subject, both in a political and Christian aspect, necessarily claims consideration in a work treating of a settlement once solely penal—but now totally devoid of a convict population; and the leading facts connected therewith, deserve record not only as composing a portion of the history of the past, fraught with warnings of the most serious nature, but also as affording incontrovertible evidence that England, notwithstanding her shortcomings as a Christian nation, has yet (at least in some degree) awakened to a sense of her responsibility as such. To be convinced of this, it needs but to look back upon her general conduct at the close of the last and the early part of the present century, with regard to the subject now under review, and compare it with the different line of policy now pursued.

In 1787, England, her statesmen, her philanthropists, and public opinion, through its organ the press, while evincing considerable solicitude for their temporal welfare, utterly disregarded the spiritual wants of the expatriated criminals sent to found a penal settlement at the antipodes, and also of those employed to guard and govern the erring wanderers.

The Rev. Samuel Marsden, the much esteemed chaplain of New South Wales from 1794 to the period of his death in 1838, in whose domestic circle I had the privilege of witnessing the practice as well as hearing the inculcation of the precepts of the Gospel, thus records this astounding fact; I say astounding in reference to the convictions and actions of the British nation,—of its statesmen, legislators, press, and public opinion, at the present day. The reverend gentleman states that “when the fleet was on the point of sailing with the first convicts for New South Wales in the year 1787, *no clergyman had been thought of*, and that a friend of his own, a pious man of some influence, anxious for the spiritual welfare of the convicts, made a strong appeal to those in authority upon the subject, and through the interest of the late bishop Porteous with Sir Joseph Banks the Rev. Richard Johnston was appointed chaplain.” Judge Burton, in his excellent

work on the *State of Religion and Education in New South Wales*, published in 1840, when narrating this circumstance, states that “an oversight equally remarkable took place upon the recent expedition to Port Essington, (for the foundation of a new colony on the north-west coast of Australia) under the command of Sir Gordon Bremer, in H.M.S. *Alligator*, accompanied by the *Britomart* brig, lieutenant Stanley commander, (son of the late bishop of Norwich) which sailed from England with *five hundred souls*, unprovided with any minister of religion. There was no clergyman at the disposal of the bishop of Australia when the expedition reached Sydney on its way to the place of intended settlement, but his lordship furnished it with such means as were in his power, he caused a temporary church to be constructed, and bibles, prayer-books, and other religious publications to be supplied to Sir Gordon Bremer.” No Christian will be surprised to learn that misfortune, sickness, and death have been rife at Port Essington, and that now, in February, 1850, a British ship of war is on its way from Singapore to convey the ill-fated survivors away from a settlement in whose formation the ordinances of religion were entirely unprovided for and disregarded.

To return to New South Wales. It is true that one minister of religion did accompany the fleet of 1787, and well he performed the duties to the extent of his strength; he visited the sick and the convicts in their several abodes, and administered to them consolation and instruction. But his labours were far from being satisfactory to himself, or as useful as he wished them to his flock; while barracks, and other substantial structures were built for the use of man, no temple was reared for the worship of the living God. For nearly seven years divine service was celebrated in the open air, subject to all the inconveniences and interruptions arising from a changeable climate. At length the reverend gentleman caused a temporary place of worship to be constructed at his own expense, which was opened for public worship on the 25th of August, 1795; but the attendance was small, and up to the year 1800, when governor Hunter quitted the colony, there were few who evinced any religious feeling. [Evidence before the House of Commons in 1812.] On the return of the Rev. Mr. Johnston to England in 1800, the spiritual guidance of the colony, with its annually increasing num-

ber of convicts, was confided to one chaplain (the Rev. Samuel Marsden) for seven years. In 1803, when the population amounted to 7,097 men, women, and children, it was found that there were a large number of Roman catholics without any pastor. To remedy this serious evil, a convict named James Dixon, who, it was alleged, had formerly been in priest's orders, received a conditional emancipation, with permission to exercise clerical functions.

In 1807, the Rev. S. Marsden proceeded to England to endeavour to procure assistance for the ministry of the established church, and to advocate a Christian mission to New Zealand. The Rev. Mr. Fulton temporarily officiated during his absence. In 1808, the Rev. Mr. Cowper arrived; in 1809, the Rev. Mr. Cartwright; and in 1810, Mr. Marsden returned, but the labour of these four chaplains was still very severe in visiting the widely spread districts..

In 1817, when the population amounted to 17,214 souls, of whom 6,777 were convicts, dispersed over a large territory, there were but five chaplains. At this time only one church had been built at Sydney, and one at Paramatta; but so few persons attended divine service, that one of the early governors was informed of the fact, and being induced himself to attend the Sabbath worship, announced that "he expected his example would be followed by the people." With reference to the Roman catholic church, how long it was left under the superintendence of an emancipated convict, is not exactly known: in 1818, the Rev. Mr. Flynn was appointed archpriest at Sydney, with power to confirm; but on his arrival at New South Wales he was rejected by the local government, and sent home on the ground of his having come out unsanctioned by the civil authorities. Mr. Flynn left behind him in the house of a Roman catholic at Sydney a "consecrated wafer," the symbol of the Eucharist, and the sole spiritual consolation which the Roman catholics possessed until the year 1820, was the assembling round the "bread of life" to offer up their prayers; at length they were gratified by the arrival of the Rev. Mr. Therry, who for six years was the only Roman catholic priest for New South Wales and Van Diemen's island.

The Presbyterian church was equally neglected. Until 1826 no minister of this persuasion was appointed to a chaplaincy in the colony, although a Presbyterian church

had been erected on the banks of the Hawkesbury, in 1809, in which a Scotch settler officiated as catechist. To the meritorious and long-continued exertions of the Rev. Dr. Lang, the Presbyterians were, in 1824-5, indebted for some attention to their urgent wants.

In 1833 the population consisted of 60,794 souls, of whom 16,151 were convicts; the Protestants numbered 43,095, and the Roman catholics 17,238. The Church of England establishment then consisted of an archdeacon and fifteen chaplains, and within forty miles of Sydney there were seven stone or brick churches, two others in more remote parts of the colony, and several less permanent buildings. The Roman catholics had three clergymen, and the Presbyterians two. But so far was spiritual instruction from being deemed a necessity, for which it was the positive duty of government to provide, that Norfolk Island, with several hundred convicts, had no chaplain; and in Port Stephens, with a large body of convicts, and 100 free settlers, there was only an Irish convict schoolmaster. Under such circumstances it cannot be matter of surprise that crime rapidly increased in the colony; that the free emigrant population took alarm when they found, year after year, the convicts largely increased by augmenting deportations from England until their numbers equalled those of the emigrant class. The attention of the imperial parliament was called to the subject; it was said that transportation had failed, both as a punishment deterring from crime in England, and as a means of reformation in Australia, whereas it was the neglect of religious instruction, the total want of spiritual aid, the assignment of convicts to settlers who were themselves but recently emancipated, and who during their bondage had never heard the words of religion: it was these, and other radical defects, which had perverted the beneficial effects that might and probably would have arisen from a judicious system consistently carried out. The matter was first brought under public consideration by Mr. Justice Burton, one of the judges of the supreme court of New South Wales, in a charge which he delivered to the jury on the 18th November, 1835, a charge which at first exposed this eminent and pious judge to great and unmerited reprobation, but which under Providence eventually worked great good.

The following is an abstract of the facts

stated in this remarkable document, which soon attracted the attention of the government in England, as well as that of the Australian public. It was therein stated that—

"In 1833, there had been 135 capital convictions; on sixty-nine sentence of death had been passed; forty-five of those capital convictions, and fifteen of these sentences of death had taken place upon his (judge Burton's) judicial responsibility.

"In 1834, 148 capital convictions, in eighty-three of which sentence of death had been passed, forty-eight of which convictions and thirty-six of which sentences had been before himself.

"In 1835, 116 capital convictions, and seventy-one sentences to suffer death, fifty-six of which convictions had taken place before him, and twenty-eight of which sentences he had passed. In addition to which sentences there are thirty-three prisoners who have been capitally convicted, waiting for sentence. Whether death might be recorded or passed upon them, the number of capital convictions was a feature sufficiently striking in the administration of justice in this colony; for it was to be remarked, that capital punishment had been taken away from several offences, such as forgery, cattle-stealing, stealing in a dwelling-house above the value of £5 (those fruitful sources of capital convictions in former times), ever since the 1st of August, 1833, so that those which had taken place since that time were all for crimes of violence, murder, rape, robbery, burglary, maliciously stabbing, shooting, and wounding, and offences of similar character.

"The calendar of the present sessions (1835) presented the following facts:—There had been convicted of murder, 2; stabbing with intent, &c., shooting at with intent to kill, cutting and maiming, assault with intent to do bodily harm, 6; manslaughter, 2; arson, 1; piracy and burglary, 8; housebreaking, 10; highway robbery, 7; receiving, 1; forgery, 2; larceny on the high seas, 1; larceny, 4; cattle-stealing, 1; piracy only, 1; robbery, 8—total, 54.

"Prisoners in gaol on the 18th of November, 1835, who had been in custody previous to the 2nd of November, 1835, viz.—For trial on the 18th, 7; quarter sessions, 6th December, 39; stand for next criminal session, 13; for discharge, 3; consideration, 19—total, 81. Tried on the 18th, 7; convicted, cattle stealing, 2; robbery and receiving, death recorded, 4; acquitted, 1—total, 7.

"The picture presented was one of the most painful description: it would appear, to one who could look down upon the community, as if the main business of all were the commission of crime and the punishment of it; as if the whole colony were continually in motion towards the several courts of justice, and the most painful reflection of all must be, that so many capital sentences and the execution of them have not had the effect of preventing crime by way of example.

"In his (judge Burton's) opinion, one grand cause of such a state of things was, an overwhelming defect of religious principle in this community; a principle which he considered as the polar star to guide a man in all his conduct, and without which none other would prevent him from crime. But that he might not be said to make so grave a charge upon light foundations, he would instance the crimes of violence, the murders, the manslaughters in drunken revels, the perjuries, the false witnesses from motives of revenge or reward, which in the proceedings before

him had been brought to light. Many instances upon his notes of evidence in cases tried before him, had brought him to the conclusion that there is an overwhelming defect of religious principle in this colony.

"He could not but acknowledge there was a deficiency of religious instruction in the colony. There was not that number of religious teachers its extent and population required. He did not intend to impute blame to any one individually. But when he imputed a want of religious principle, he looked around to see whether there was an adequacy of religious instruction in order to point their attention to this circumstance; so that if they found a deficiency, they might call upon the proper authorities to make such an addition as necessity required. There were at present only thirty such persons for the whole of this scattered population, independent of a few whom the charity of societies in England had supplied—a number too scanty to admit of any being spared for the penal settlements. It had been his lot to visit one of those penal settlements. To see them herding together without any chance of improvement, without any religious instruction, was painful in the extreme. One man particularly had observed, in a manner which drew tears from his eyes and wrung his heart when he was placed before him for sentence, 'Let a man be what he will when he comes here, he is soon as bad as the rest; a man's heart is taken from him, and there is given to him the heart of a beast.' He did not impute blame to any one, and he trusted no such motives would be ascribed to him; but in a question of such vital importance, which involved not only the present but the ultimate welfare and security of the colony, all were interested; and it was the duty of every one to do what he could to ameliorate, if possible, its present condition. He only stated the fact, and lamented it.

"He felt, however, bound to say, that masters of convicts were not sufficiently attentive to the morals of their men; defective as our means of religious instruction might be, it had been proved before him, that highly respectable persons, residing near to a church in the same town, and within a few miles, not only neglected to oblige them to attend the church, but actually suffered them to spend the Lord's day amidst scenes of drunkenness and debauchery. Nor was that all. It had been further proved that the Lord's day, by some masters, was made a day of labour, and that some other day was allowed to them as an equivalent. But what equivalent, he would ask, could a master give for the loss of that moral instruction which the security of society required? There were, doubtless, many who, being under the necessity of attending a distant service, could not take their servants; but he would ask whether, in such situations, they did all which they could? He would ask, what was the example which had been set by them? What instruction did they give them? It was in every man's power to set an example of moral conduct, and observance of the Lord's day, in his own person, and to gather his family and servants together for divine worship, whether a church was near or distant. And he would farther beg to impress upon their minds, that they were not in a situation to blame others for want of moral instruction so long as they did not avail themselves of such means as were already within their power. He was sorry to say, that many of the worst crimes which had been brought under his notice were committed on the Lord's day, and he was led to apprehend, that

there was a very general disregard and desecration of it. There were other causes which led, in his opinion, to crime in this country. With respect to them there might be a difference of opinion; he could only say that he had formed his own; and as he was prepared to give it to the governor, he should be wanting in candour if he did not state it to them.

"He had been induced, by what had been proved before him in that court, gravely to consider the question of convicts working in gangs out of irons, and felt convinced it was one of the most fruitful sources of crime to be found in the colony. He had before him a return, from which it appeared that the number of convicts at this time employed upon the roads is 2,240, of whom 1,104 are out of irons! and (he continued) when they, the jury, considered who these latter men were, and what they had been—placed under the guardianship of a convict overseer; that they left their huts in any number, armed or unarmed as they pleased—in short, from the evidence he had upon his notes respecting the conduct of the road parties of the colony, it would appear that those establishments were like bee-hives, the inhabitants busily pouring in and out, but with this difference—the one works by day, the other by night; the one goes forth to industry, the other to plunder. To the carelessness or worse conduct of overseers, he did attribute a vast proportion of the burglaries and robberies that were committed in the country districts. It had been proved in a recent case, (he spoke from his notes), that a party of these men had committed a robbery, under such circumstances of aggravation, that sentence of death had been passed upon four of them. He must, however, say, that the settlers were themselves to blame for many of the crimes committed by convicts belonging to road parties. They too frequently appear to have employed these men in their leisure or working hours, or on a Sunday, paying them for their labour in money, which was spent in drink, and so prepared them for the commission of crimes.

"He must press upon their attention, considering the nature of the population of this colony—the fact that men are passing daily from one class to another—what must be the effect upon those institutions, and of men passing from one class to another without moral improvement? To himself it appeared, that it must be the total corruption of them all. In that point of view alone the subject was well worthy their grave attention. Free institutions could only be appreciated and enjoyed by the virtuous; coercion was for the depraved; and a vicious people have never continued to be free. He stated, that he felt he need do no more to impress upon all their minds the necessity there was for exercising all their influence to procure the moral improvement of those persons who are committed to their trust, and their utmost vigilance and superintendence over them to restrain them from crime, than draw their attention to the comparative numbers of the free and convicts in this colony, and to the fact, that the tide of convict population still sets strongly here, whilst that of free emigration appears feebly to reach our shores. He stated, that it appears from the census taken in September, 1833, published in the next government *Gazette* after the 31st December, 1833, that it was there estimated that there were in this colony—free males, above twelve years of age, 17,578; convict males, 21,845: and that he had been informed, that the number of free emigrants since arrived, up to

November, 1835, has been 2,800, of whom 900 are men, the rest being women and children; and that the number of convicts arrived since the same time has been 8,163, of whom 7,357 are males. He trusted they would take with them to their homes the facts he had stated, and the opinions he had expressed, and communicate them to their neighbours, so that each might judge for himself as to the justness of his views. The facts themselves he had drawn from what had come before him in evidence, and as such he put them. He sincerely hoped they would have proper weight upon the minds of every one to whom they were stated; and that as he had taken this opportunity of inquiring, on his part, what he had done during the last three years, each one of them would also consider what he had been doing during the same period."

But not only did the judge on the bench warn his Majesty's government of the spiritual destitution of the colony, the archdeacon (Broughton) of New South Wales proceeded to England in 1834 for a similar purpose; in February, 1835, this exemplary divine made a statement to the *Christian Knowledge Society* and to the *Society for the Propagation of Christian Knowledge*, when £3,000 was immediately placed at his disposal by the first-named society, and £1,000 by the latter. New South Wales was erected into a diocese, but bishop Broughton had the mortification of returning to the colony unaccompanied by a single clergyman, "owing to the refusal of his Majesty's government to sanction any allowance towards the expense of the passage, or residence, or means of support of any additional clergymen." This determination apparently arose, according to the first report of the Australian Diocesan Committee, from a prevailing impression that the inhabitants of the colony were opposed or at least indifferent to an extension of the ordinances of the church of England, whereas the reverse was the case. Although in some places the rites of religion were only performed monthly, in others *half-yearly*, and notwithstanding that the population had doubled between 1829 and 1837, and become much more widely scattered over the country, only two additional clergymen had been appointed from England.

Public opinion was now, however, strongly directed to the question of secondary punishments; the inefficiency of transportation, as a preventive of crime, was powerfully urged by the archbishop of Dublin (Dr. Whately) and other eminent persons, and a very unfavourable feeling was created against New South Wales, both as a penal settlement and as a colony to which respectable emigrants might resort. In the years 1837 and 1838 a select committee of the House of Commons

was therefore appointed to consider on this highly important subject, and although the evidence was to a great extent partial, yet many valuable facts were adduced deserving of record in a work of this nature.

From the report of the transportation committee of the House of Commons in 1838, it appears that "75,200 convicts have been transported to New South Wales since its settlement in 1787:—on the average of the last five years, 3,544 offenders have been annually sent there; and the whole convict population of the colony in 1836 amounted to 25,254 men and 2,577 women, in all 27,831. To Van Diemen's Island 27,759 convicts have been sent since the year 1817; the number annually transported there, on the average of the last five years, is 2,078; and the convict population in 1835 was 14,914 men and 2,054 women. At Norfolk Island the number of convicts, most of whom had been retransported for offences committed in New South Wales, was in 1837 above 1,200."

The plan formerly adopted in reference to Australian convicts is thus described by the transportation committee of 1838:—

"After sentence of transportation has been passed, convicts are sent to the hulks or gaols, where they remain till the period of their departure arrives. On board convict vessels the convicts are under the sole control of the surgeon-superintendent, who is furnished with instructions, as to his conduct, from the Admiralty. The precautions which have been taken against disease, and the better discipline now preserved in these ships, have applied an effectual remedy to the physical evils of the long voyage to Australia, and prevented the mortality amongst the prisoners, which prevailed to a fearful extent during the earlier periods of transportation. Little diminution, however, has taken place in those moral evils, which seem to be the necessary consequences of the close contact and communication between so many criminals, both during the period of confinement previous to embarkation, and during the weariness of a long voyage.

"As soon as a convict vessel reaches its place of destination, a report is made by the surgeon-superintendent to the governor. A day is then appointed for the colonial secretary, or for his deputy, to go on board, to muster the convicts, and to hear their complaints if they have any to make. The male convicts are, subsequently, removed to the convict barracks; the females to the penitentiaries. In New South Wales, however, regulations have lately been established, by which, in most cases, female convicts are enabled to proceed at once from the ship to private service. It is the duty of an officer, called the principal superintendent of convicts, to classify the newly-arrived convicts; the greater portion of whom are distributed amongst the settlers as assigned servants; the remainder are either retained in the employment of the government, or some few of them are sent to the penal settlements.

"In 1836 the number of assigned convicts in Van Diemen's Land was 6,475; in New South Wales in 1835 the number was 20,207. In the earlier periods

of the colony of New South Wales the supply of convicts so much exceeded the demand for their services by the settlers, that the government used to grant certain indulgences to those settlers who were willing to maintain convicts. More recently, the demand has exceeded the supply; the obtaining convict labourers has become, therefore, to a certain degree a matter of favour, which has given rise to complaints of abuse in the distribution, especially of the more valuable convicts. All applications for convicts are now made to an officer, called the commissioner for the assignment of convict servants, who is guided in his distribution of them by certain government regulations. Settlers, to whom convicts are assigned, are bound to send for them within a certain period of time, and to pay the sum of £1 a head for the clothing and bedding of each assigned convict. An assigned convict is entitled to a fixed amount of food and clothing, consisting, in New South Wales, of 12 lbs. of wheat, or of an equivalent in flour and maize meal, 7 lbs. of mutton or beef, or 4½ lbs. of salt pork, 2 oz. of salt, and 2 oz. of soap weekly; two frocks or jackets, three shirts, two pair of trousers, three pair of shoes, and a hat or a cap, annually. Each man is likewise supplied with one good blanket, and a palliasse or wool mattress, which are considered the property of the master. Any articles, which the master may supply beyond these, are voluntary indulgences. The allowance in Van Diemen's Land differs in some particulars, and on the whole is more liberal.

"Male assigned convicts may be classed under the various heads of field labourers, domestic servants, and mechanics: the services of the last class being of more value than those of the two former, are estimated in assignment as equal to those of two or more field labourers. In the assignment of convicts scarcely any distinction is made either on account of the period of the sentence, or on account of the age, the character, or the nature of the offence of the convict. The previous occupation of a convict in this country mainly determines his condition in the penal colonies. For instance, domestic servants, transported for any offence, are assigned as domestic servants in Australia: for the greater portion of such servants in those colonies, even in the establishments of the wealthiest classes, have hitherto been transported felons. They are well fed, well clothed, and receive wages from £10 to £15 a year, and are as well treated in respectable families, as similar descriptions of servants are in this country. In many instances, masters have even carried to an illegal extent their indulgences to their convict servants.

"Convicts who are mechanics are as well, if not better, treated than those who are domestic servants for as every kind of skilled labour is very scarce in New South Wales, a convict who has been a blacksmith, carpenter, mason, cooper, wheelwright, or gardener, is a most valuable servant, worth three or four ordinary convicts; he is eagerly sought after, and great interest is made to obtain him. As a mechanic can scarcely be compelled by punishment to exert his skill, it is for the interest of the master to conciliate his convict mechanic in order to induce him to work well; in too many cases this is effected by granting to the skilled convict various indulgences; by paying him wages; by allotting to him task-work, and by permitting him, after the performance of the task, to work on his own account; and, lastly, by conniving at, or overlooking, disorderly conduct; for the most skilful mechanics are generally the worst behaved and most drunken.

"The condition, however, of by far the most numerous class of convicts, those who are employed as shepherds or neatherds (of whom in 1837 there were above 8,000 in New South Wales), and in agriculture generally, is undoubtedly inferior to that of a convict who is either a domestic servant or a mechanic; they are, however, according to most of the witnesses, better fed than the generality of agricultural labourers in this country; most masters either pay them wages in money, or give them, instead of money, tea, sugar, tobacco, spirits, and other trifling indulgences.

"On the whole, therefore, your committee may assert that, in the families of well-conducted and respectable settlers, the condition of assigned convicts is much the same as the condition of similar descriptions of servants in this country; but this is by no means the case in the establishments of all settlers. As the lot of a slave depends upon the character of his master, so the condition of a convict depends upon the temper and disposition of the settler to whom he is assigned."

The act 5 Geo. IV., c. 84, gave the governor of a penal colony a property in the services of a transported offender for the period of his sentence, and authorized him to assign over such offender to any other person. There was a further power given to the governor by the act 30 Geo. III., c. 47, who, in the name of his Majesty, was authorized to remit absolutely or conditionally, the whole of the sentences of convicts; and the 9 Geo. IV., c. 83, empowered the governor to grant a temporary or partial remission of sentence; this power was limited by acts 2 & 3 Wm. IV., c. 62.

By the system in force in New South Wales "tickets of leave," which enabled a convict to live free, and work on his own account, within a prescribed district, (binding him to appear on Sundays before a magistrate), were granted to a seven-year convict, at the expiration of four years; for fourteen years at the end of six years; and for life at the end of eight years, unless his conduct during these periods had been very bad. These tickets of leave were liable to be cancelled, if the holder committed any offence for which he was punishable by a magistrate; and the effects of the system are thus recorded in the report of the committee of the House of Commons in 1838, p. xvii. :—

"This indulgence on the whole has a very useful effect, as it holds out hope to a convict if he behave well, and is liable to be reassumed in case of misconduct. Ticket-of-leave men find no difficulty in obtaining work at high wages; and having acquired experience in the colony, they are frequently preferred to lately-arrived emigrants. They fill many situations of trust in both colonies; such, for instance, as constables in the police, overseers of road-parties and chain-gangs; the better educated have been employed as superintendents of estates, as clerks to bankers, to lawyers and to shopkeepers, and even as tutors in private families; some have married free women, are in prosperous circumstances, and have even become

wealthy; and the real editor of one of the leading journals in the colony of New South Wales was a ticket-of-leave convict."

Many of the "ticket-of-leave" men, or those who obtained conditional or local pardons for long-continued good conduct, or for useful services, acquired large fortunes; one, named Sam Terry, possessed, it is said, an income of £40,000 a year; I rode over a large estate belonging to him on the beautiful banks of the Nepean river, the greater part of which was under cultivation, growing wheat, barley, oats, maize, clover, peas, beans, and other valuable products: it had also extensive herds of fine cattle and flocks of sheep: but the habitation of the owner of this vast property—with wealth then estimated at a quarter of a million sterling—was mean in the extreme. He could not, I believe, either read or write, but he had nevertheless a quickness of apprehension and a readiness in detecting errors in the accounts of his overseers which was so remarkable, that, as was said of Hyder Ali (the father of Tippoo Sultan) who also could neither read nor write, no man attempted to deceive him.

This and other instances becoming known, transportation to "Botany Bay" was deemed a very trifling punishment. The evidence laid before the House of Commons in 1837–8 proved the reverse, and the committee thus condense that evidence :—

"Your committee consider, that in the preceding pages they have fully established the fact, that transportation is not a simple punishment, but rather a series of punishments, embracing every degree of human suffering, from the lowest, consisting of a slight restraint upon the freedom of action, to the highest, consisting of long and tedious torture; and that the average amount of pain inflicted upon offenders, in consequence of a sentence of transportation, is very considerable. The most important question, however, as to the efficacy of transportation as a punishment, is not with regard to the actual amount of pain inflicted, but the amount which those who are likely to commit crime, believe to be inflicted. It is proved, beyond a doubt, by the testimony of every witness best acquainted with the actual condition of convicts, and likewise by numerous facts stated in the evidence, that most persons in this country, whether belonging to the criminal population, or connected with the administration of justice, are ignorant of the real amount of suffering inflicted upon a transported felon, and underrate the severity of the punishment of transportation. Nor is this to be wondered at, when it is considered, that the penal colonies are 16,000 miles distant, and that the ignorant mass of the criminal population of this country are often misled by their evil passions to underrate the consequences of their evil deeds. On their arrival at the antipodes, they discover that they have been grievously deceived by the accounts transmitted to them, and that their condition is a far more painful one than they expected. For those convicts

who write to their friends an account of their own fate, are generally persons who have been fortunate in the lottery of punishment, and truly describe their lot in flattering terms; those, on the other hand, who really experience the evils of transportation, and are haunted with 'a continual sense of degradation,' are seldom inclined to narrate their sufferings except when they have powerful friends from whom they may expect assistance. Numerous instances, likewise, were mentioned of convicts, who, degraded and demoralized by their punishment, have, from feelings of anger and revenge, indulged in the malicious satisfaction of denying the efficacy of the law, and of braving those who had brought them to condemnation, by describing as pleasures the tortures they were enduring; by affecting indifference for a punishment, which other criminals were actually committing murder and seeking death in order to avoid. Thus it is proved by the most irrefragable testimony, that both those who are prosperous and those who are miserable, the drawers of prizes and the drawers of blanks in this strange lottery, influenced perhaps by that desire, common to human nature, of having companions and partakers whether of misery or of happiness, concur in tempting their friends in this country, by the most alluring descriptions, to come out and join them; thereby tending to diminish the little apprehension, if any, which is entertained by the lower orders for the punishment of transportation.

"Transportation, though chiefly dreaded as exile, undoubtedly is much more than exile; it is slavery as well; and the condition of the convict slave is frequently a very miserable one; but that condition is unknown, and cannot be made known: for the physical condition of a convict is generally better than that of an agricultural labourer; the former is, in most cases, better fed and better clothed than the latter; it is the restraint on freedom of action, the degradation of slavery, and the other moral evils, which chiefly constitute the pains of transportation, and of which no description can convey an adequate idea to that class in whom transportation ought to inspire terror."

A magistrate, generally himself a master of convicts, was authorized to inflict fifty lashes on a convict for "drunkenness, disobedience of orders, neglect of work, absconding, abusive language to his master or overseer, or any other disorderly or dishonest conduct." For these offences the convict might likewise be punished by imprisonment, solitary confinement, and labour in irons on the roads. In 1835, the number of convicts in the colony did not exceed 28,000; the number of summary convictions for the year was 22,000; in one month, in 1833, the convicts flogged numbered 247, and the lashes administered were 9,874, which would give, for the year, 2,964 floggings, and 108,000 lashes inflicted. The report of 1838 is filled with horrible details of crimes and punishments, equally at variance with the general character of Englishmen.

The fearful extent to which corporal punishment was carried is shewn in the following numerical return of flagellations

at Macquarie Harbour, for the years 1822, '23, '24, '25, and '26:—

In the Years	Number of Prisoners sentenced.	Total Lashes sentenced.	Lashes remitted.	Total Lashes inflicted.
1822	169	7,000	863	6,137
1823	229	9,925	825	9,100
1824	153	6,850	141	6,709
1825	112	5,211	494	4,716
1826	172	7,324	1,263	6,061
Total	835	36,310	3,586	32,723

Note.—Settlement formed 3rd January, 1822, 70 male prisoners; 31st December, 1822, 181 prisoners at the settlement.—31st December, 1823, 228 prisoners at the settlement.—31st December, 1824, 262 prisoners at the settlement.—31st December, 1825, 259 prisoners at the settlement.—31st December, 1826, 295 prisoners at the settlement.

Thirty-two thousand, seven hundred and twenty-three lashes inflicted in five years! On an average, nearly forty lashes to each of the prisoners; and, be it remembered, with a "cat-o'-nine-tails," with nine knots on each tail, and of a heavier weight than any "cat" used in the army or navy.

The extreme severities exercised at Norfolk Island—the penal dependency of New South Wales, were fearful, and the transportation committee of 1837–38, reported the evil effects of such a system in language which cannot be transferred to these pages. The committee add, that at the penal settlements of Van Diemen's Island, the severity of the system pursued is as great, if not greater, than that at Norfolk Island, and the culprits equally reckless, if not even more so—committing murder (to use the words of sir George Arthur), "in order to enjoy the excitement of being sent up to Hobart Town for trial, though aware that, in the ordinary course, they must be executed within a fortnight after arrival." At one of these settlements, named Macquarie Harbour, (now abandoned) 116 convicts absconded, between 3rd January, 1822, and 16th May, 1827; of these, seventy-six are supposed to have perished in the woods: one was hanged for murdering and eating his companion; two were shot by the military; eight are known to have been murdered, and six eaten by their companions; twenty-four escaped to the settled districts, thirteen of whom were hanged for bush-ranging, and two for murder—total, 101 out of 116.

Perhaps no better illustration could be given of the manner in which the local government of New South Wales viewed the sabbath, more than half a century after the

foundation of the colony, than is contained in the evidence before the House of Commons' committee of February, 1838, of the very reverend William Ullathorne, (p. 21), who says—

"I visited a chain-gang, near Paramatta, on a Sunday, for the purpose of administering religious consolation, and when I came to the gang I found a series of boxes, and when the men were turned out, I was astonished to find the numbers that were turned out of each of those boxes; I could not have supposed that those boxes could have held such a number. *I found that they were locked up there during the whole of the Sunday; likewise during the whole of the time from sunset to sunrise.* On looking into those boxes, I found that there was a ledge on each side, and that the men were piled upon the ledges, and others below on the floor; and I believe from the bringing together of such numbers of men, heated as they are and excited, the consequences are of a very immoral kind. As I left the colony, I put a question to a clergyman, who has had much experience there, as to the space allowed to each convict in those boxes; the answer given was, that the average was about eighteen inches each man, but that they varied considerably. Eighteen inches square?—Yes; there are two shelves, so that some are piled above, and some below. He stated to me at the same time, that in the hulks he believed it was not more than sixteen inches, and that they were so closely piled, some ten or fourteen being put in a small cell, that they had not room to lie on their backs, and were obliged to lie sidewise. You have stated to the committee the condition of the male convicts; what is the condition and conduct of the female convicts?—The conduct of the females is very bad indeed; indeed they are, I should say, more irreformable than the male convicts; when a woman is bad, she is generally very bad."

By this herding together of criminals, the best were brought down to a level with the worst in disposition and corruption, and the finishing stroke was thereby given to the terrible system of severity only too frequently practised. Local magistrates being empowered to scourge the criminals at will; a look, a word, caused the scourge to be immediately administered to the unhappy offender—who sought his revenge in the murder of his master or the overseer—in the burning of his house and farm-stacks, and in the poisoning of the cattle; or the delinquent fled to the wild districts, became a bushranger, and was soon captured, and executed on the scaffold.

I saw and conversed with ten criminals in their condemned cells, on the eve of their execution. They had never heard the word of God preached since the period of their childhood, some not even then; they had never entered a church or chapel in the colony, or attended a sabbath service; and they had fled to the bush because their backs

had been repeatedly bared to the bone by constant scourgings. Having witnessed, while serving in the army and in the navy, the disastrous effects of subjecting men to the degrading torture inflicted on brutes, I bear my humble testimony in support of the evidence adduced before the transportation committee, that this species of punishment has had a most disastrous effect.

One passage in the parliamentary evidence deserves record on this important subject: the witness (who had great experience on the subject) was asked the relative value of the mild or the coercive system. He replied,

"I believe that a system of coercion will never reform men; it may restrain them, from fear, so long as the coercion is suspended immediately over them, but I do not think that it can be at all productive of reform; I always find that where there is severe coercion the pride of man rises up against that coercion, and that he hardens himself, and that it is generally his boast among those with whom he is associated, that he can endure as long as his master can inflict. I do not think that the result of a severer system of coercion has been followed by a greater amount of reformation; and I think if the number of prisoners at present in Van Diemen's Land undergoing punishment for new crimes in that country be inquired into, it will be found that the result has not been to reform men. I find that in the year 1835 the number of male convicts in Van Diemen's Land was 15,724; of this number I found that 3,947 were undergoing punishment at that time for new crimes in the colony, that is to say, about one-fourth; whilst I find at the same period that 2,462 enjoyed the indulgence of tickets of leave; they are somewhat less than one-sixth. Of females, I find, in 1835, that there were 2,195, and of those 408 were in the house of correction, that is to say, one-fifth; and that only 192, or one-tenth, had the indulgence of tickets of leave. I think, when it is considered how long that system has been in operation, if the result had been to reform, the first effects which would naturally result, viz. the greater number that would be under punishment, ought to have passed away, and that there ought to have been found very few comparatively under punishment; but if the number under punishment in Van Diemen's Land is compared to the number under punishment in New South Wales, I believe it will be found that the relative punishment is much greater in Van Diemen's Land than in New South Wales. It might be said that the greater number under punishment is only in consequence of the system that a greater number of criminals are brought to punishment, and a smaller number escape; this certainly would be the case in the beginning of the system, but after the system had wrought for some years, if it had created reformation, there ought to have been a much less number under punishment. I would remark, likewise, with respect to the system of severity, that it tends in another way to induce bad conduct; when a prisoner finds himself so severely treated by his master, he will always be apt to imagine that in another situation he will be much less severely treated; he will consequently be induced to behave particularly ill, in order to be returned to the government. I believe it has been stated in the instructions to overseers of chain-gangs in Van Diemen's Land, that

the prisoners are to be considered by them as under a sort of mental delirium; that they see all things through a false medium; in such a case, I should suppose that the prisoners who are under a severe system of coercion, would imagine that their condition could not possibly be worse, and the consequence would be that they would be induced to behave very ill, for the purpose of being removed from the service of their masters. I believe it has been found by experience that severe coercion has been productive of crimes of great magnitude; the quantity of bushrangers in Van Diemen's Land was at one time very great, and the number of executions was at one time extraordinarily great; and I found crimes existing in Van Diemen's Land resulting indirectly from that severe system, of which I have known no cases in New South Wales; there have been cases where prisoners have been so coerced in Van Diemen's Land that they have been determined at any cost whatever to release themselves from it; they have broken from their confinement, and after plundering the cottages and making to the woods, finding that they could not dare to appear again, they have had recourse to cannibalism for subsistence. I remember one particular case, which produced a great impression, when that coercive system was at its height at Macquarie Harbour, eleven men broke away, and finding that the police were in chase after them, they retired into the bush."

To the credit of the colonists, be it said, that they lost no time in earnestly appealing to the imperial government, as soon as the urgency of the matter was comprehended. A petition was transmitted to the House of Commons, in 1836, from six members of the Legislative Council, fifty-seven justices of the peace, four clergymen, five solicitors, 355 landholders, merchants, and other colonists, in which the petitioners stated, that although the colony presented an aspect of extraordinary and unexampled prosperity, the best interests of the community were threatened with serious danger, by the fearful increase of crime which had, of late years, taken place in the colony. The petitioners considered that the existing colonial law for the regulation of juries, by admitting persons to sit as jurors who had undergone punishment for crime, and were of bad repute, did not guard the administration of justice from sinister and contaminating influence, and that its natural effect was to encourage crime. New South Wales had not then an elective House of Assembly, and its Legislative Council, until 1842, was wholly nominated by the Crown; the colonists, therefore, were almost entirely dependent on the authorities in England for the regulation of their internal affairs, and consequently various other local grievances were laid before the House of Commons in their petition; themselves, however, taking the initiative in supplying their spiritual wants.

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In 1836, an act was unanimously passed by the Legislative Council of New South Wales, to promote the building of churches and chapels, and to provide for the maintenance of religion in the colony; and, in the language of the governor, Sir Richard Bourke, to Lord Glenelg, his Majesty's secretary for the colonies, 14th September, 1836, "the measure met with the sincere and grateful acquiescence of all classes of the community." By this act, whenever a sum of not less than £300 was raised by private contribution, and applied towards the building of a church or chapel, and a dwelling for the minister attached, the governor and council were authorized to issue a sum equal to that subscribed towards the church or chapel, and the building for the resident minister. The governor and council were also empowered to grant unto duly appointed ministers, salaries varying from £100 per annum for 100 adults, to £150 and £200 per annum for a resident population of 150 or 200 adults. There are other favourable provisions in the enactment which was applicable to the church of England, church of Scotland, and church of Rome. The colonists also provided for the passage, from the United Kingdom to Australia, of ministers of the gospel of the three denominations named, at the rate of £100 for single men, and £150 for those who were married, and twelve clergymen of the established church were immediately sent to New South Wales, under the recommendation of the Society for the Propagation of the Gospel; twelve presbyterian ministers, under the recommendation of the General Assembly of the church of Scotland, and of the Synod of Ulster; and seven ministers of the church of Rome, recommended by the authorities of their church, were also sent out by government in 1837, conformable to the local enactment in New South Wales in 1836. Three German missionaries of the Lutheran church were also, in 1837, sent to New South Wales, at the expense of the colonists, who were to be employed in a mission for the religious instruction of the aborigines.

In order to carry out a general system of gratuitous education for the poorer classes of the community, the colonists, in June, 1837, defrayed the expenses of obtaining from England well-qualified and respectable schoolmasters and mistresses, to whom an allowance of £100 to £150 was granted; and a salary of £150 a-year for a master,

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£100 for his wife, and a small dwelling-house was allowed. Under these provisions, his Majesty's government sent out, in 1837, sixteen teachers, carefully selected by the "Glasgow Educational Society." Six male, and four female teachers were sent by her Majesty's government, for the education of poor Roman catholics, under the recommendation of the Rev. W. Ullathorne; and, from time to time, many ministers of the gospel and teachers have proceeded to New South Wales, whose expenses have been defrayed from the local revenue.

In July, 1838, the evidence delivered before the transportation committee of the House of Commons, during the session of 1837, reached New South Wales, and produced "very considerable sensation;" and a petition, signed by "sixty-seven magistrates, and above 500 individuals of great respectability," was immediately presented to the governor, praying the appointment of a committee of the Legislative Council, to inquire into the working of the system of transportation and assignment, with a view to counteract, as far as possible, the evil impressions which might have been produced in England in respect to the social and moral condition of the colony. The Legislative Council, after protracted debates, negatived the prayer of the petition, from an apprehension that such an enquiry would tend to revive animosities in the colony which had happily, in a great degree, subsided; but the Council expressed its opinions by a series of resolutions, to be laid before both houses of the Imperial Legislature; and for this purpose they were transmitted, with the entire approbation of the governor, to her Majesty's secretary of state in the colonial department. It is an act of simple justice to place on record a declaration so highly creditable to the colony.

"Resolved—That in the opinion of this council, the numerous free emigrants of character and capital, including many officers of the army and navy, and East India Company's service, who have settled in the colony with their families, together with a rising generation of native-born subjects, constitute a body of colonists, who, *in the exercise of the social and moral relations of life, are not inferior to the inhabitants of any other dependency of the British crown, and are sufficient to impress a character of respectability upon the colony at large.*

"5. Resolved—That the rapid and increasing advance of this colony, in the short space of fifty years from its first establishment, in rural, commercial, and financial prosperity, proves indisputably the activity, the enterprise, and industry of the colonists, and is wholly incompatible with the state of society represented to exist here.

"6. Resolved—That the strong desire manifested by the colonists generally to obtain moral and religious instruction, and the liberal contributions which have been made from private funds towards this most essential object, abundantly testify that the advancement of virtue and religion amongst them is regarded with becoming solicitude.

"7. Resolved—That if transportation and assignment have hitherto failed to produce all the good effects anticipated by their projectors, such failure may be traced to circumstances, many of which are no longer in existence, whilst others are in rapid progress of amendment. Amongst the most prominent causes of failure may be adduced the *absence, at the first establishment of the colony, of adequate religious and moral instruction*, and the want of proper means of classification in the several gaols throughout the colony, as well as of a sufficient number of free emigrants properly qualified to become the assignees of convicts, and to be entrusted with their management and control.

"8. Resolved—That the great extension which has latterly been afforded of *moral and religious instruction*, the classification which may in future be made in the numerous gaols now in progress of erection, upon the most approved principles of inspection and separation, the more effectual punishment and classification of offenders in ironed gangs, according to their improved system of management, the numerous free emigrants now eligible as the assignees of convicts, and the accumulated experience of half a century, form a combination of circumstances which renders the colony better adapted, at the present, than at any former period, to carry into effect the praiseworthy intentions of the first founders of the system of transportation and assignment, which had no less for its object reformation of character, than a just infliction of punishment.

"9. Resolved—That in the opinion of this council, no system of penal discipline or secondary punishment will be found at once so cheap, so effective, and so reformatory, as that of well-regulated assignment, the good conduct of the convict, and his continuance at labour being so obviously the interest of the assignee, whilst the partial solitude and privations incidental to a pastoral or agricultural life in the remote districts of the colony, (which may be made the universal employment of convicts), by effectually breaking a connexion with companions and habits of vice, is better calculated than any other system to produce moral reformation, *when accompanied by adequate religious instruction.*

"10. Resolved—That in the opinion of this council, many men who, previously to their conviction, had been brought up in habits of idleness and vice, have acquired, by means of assignment, not only habits of industry and labour, but the knowledge of a remunerative employment, which, on becoming free, forms a strong inducement to continue in an honest course of life."

The details respecting the ecclesiastical establishment, schools, and state of crime, which will be found in a subsequent chapter, prove the correctness of the assertions contained in the above resolutions of the Legislative Council. New South Wales is now as little tainted with vice or crime as any other colony of the British crown.

At the commencement of 1839, the clergy-

men doing parochial duty in the colony under the jurisdiction of the Bishop of Australia (who was nominated in 1835) amounted to thirty-three. The number of Presbyterian clergymen was twenty-three; and of Roman catholic clergymen (including a bishop, nominated in 1835) borne upon the ecclesiastical establishment, was twenty. The number of missionaries attached to the Wesleyan mission was six; of baptist pastors five; and there was besides one "independent" minister. There were also several missionaries specially employed among the Aborigines. This affords a gratifying contrast to the state of the colony a few years previous. The result of these meritorious exertions on the part of the colonists, who bore the whole of the expense, was a rapid diminution of crime, and a marked improvement in the religious demeanour and social condition of the whole population.

In 1840, an order in Council was issued respecting the transportation of convicts, which recorded that by an act passed in the fifth year of the reign of king George the Fourth, his Majesty was empowered, by and with the advice of his privy council, from time to time to appoint any place beyond the seas, either within or without his Majesty's dominions, to which felons under sentence of transportation should be conveyed. In pursuance of the powers of this act, "New South Wales, Van Diemen's Land, and all islands adjacent thereto," were, on the 23rd June, 1824, appointed to be the places to which felons and others under sentence of transportation were to be conveyed. By the above-named order in Council, it was decreed that from and after the 1st August, 1840, "Van Diemen's Land, Norfolk Island, and the islands adjacent to, and comprised within, the government of Van Diemen's Land," should in future be the places to which felons and other offenders in the United Kingdom be conveyed, under sentence or order of transportation. From that date transportation to New South Wales ceased.

In August, 1838, the select committee of the House of Commons on transportation, recommended that "transportation to New South Wales, and to the settled districts of Van Diemen's island, should be discontinued as soon as practicable." The early adoption of this recommendation became essential to the well-being of the colony, from the large and increasing influx of convicts compared with the free immigrants. It will be seen by the accompanying table, that during the ten years ending 1834, the

number of convicts transported to New South Wales was 28,983, while the emigrants from this country were only 7,585.

Comparative Statement of the Number of Convicts arrived in New South Wales from 1825 to 1834, and of Free Emigrants from 1829 to 1834.

Year.	English.		Irish.		Tot	Free Emigrants.			
	Male.	Fem.	Male.	Fem.		Male.	Fem.	Chil.	Total
1825	764	140	901	111	1916	—	—	—	—
1826	679	—	1036	100	1815	—	—	—	—
1827	1239	342	846	160	2587	—	—	—	—
1828	1589	179	752	192	2712	—	—	—	—
1829	2008	319	1163	174	3664	306	113	1	564
1830	2096	128	685	316	3225	166	70	73	309
1831	1437	206	692	298	2633	185	98	174	457
1832	1810	248	928	133	3119	819	706	481	2006
1833	2719	377	794	261	4151	838	1146	701	2885
1834	1923	284	781	173	3161	571	596	397	1564
Total	16264	2223	8578	1918	28983	2885	2729	1971	7585

THE GRANT AND SALE OF CROWN LANDS is intimately connected with the past and present state of New South Wales, and the subject has occupied the attention of statesmen in England for twenty years, not merely as regards the amount of local revenue derivable from the sale of those lands, but as a means for the proportionate adjustment of land, labour, and capital, which, wisely used, may enable the government efficiently to promote emigration from the United Kingdom to those colonies in the temperate zone where British subjects can labour as at home, and obtain for that labour a more ample reward than could reasonably be expected in the crowded condition of the labour market in England. It may be necessary to premise, that there is little difference of opinion as to the injurious effects of granting large blocks of land to a few individuals; most persons agree in the advisability of the crown lands being sold in small sections, and put up for auction at a fixed minimum price. The collision of opinion has reference chiefly to what that fixed minimum price should be in the several colonies, or in the same colony in different stages of its progress.

In the *History of the Colonies* (vol. iv.), published in 1835, and in the *Colonial Magazine*, I stated my regret at being unable to agree with the founders of the colony of South Australia, in their resolve to obtain the assent of her Majesty's government to fix a *minimum* price of 12s. per acre on all public lands offered for sale by auction; and, among other grounds, I differed with them, 1st.—"By reason of the nature of the soil in Australia, it being extremely difficult to find good land in large continuous tracts; a rich fertile black mould of a few hundred

acres will sometimes be found suddenly interrupted by several thousand acres of a sandy scrubby ridge, far worse than Hampstead Heath." 2nd.—"A farmer could not afford 12s. per acre for the purchase of land, when 300 sheep would require upwards of 1,000 acres for pasturage." 3rd.—"The principle of concentration which it was sought to establish, by causing all land taken up to be cultivated, might be established, if the whole of Australia were like the fertile deltas of the Ganges or Nile; but that such was not the case, and Australia was better adapted for a pastoral than an agricultural country." 4th.—"Too high a price for land would check emigration." 5th.—"That the settlers would, of necessity, spread themselves over the distant unoccupied lands with their flocks and herds—no government could control their proceedings—and an excessive dispersion of population, instead of concentration, would be the result." How far this opinion has been verified, will be seen from the following abstract of the proceedings connected with the "land question" in New South Wales since the foundation of that settlement.

In 1790 (13th February), captain Phillip, then governor of New South Wales, in a letter to lord Sydney, recommended that grants of land, consisting of 500 to 1,000 acres, should be given to such settlers as his Majesty's government might send out to the colony; and, as the labour of clearing the ground of timber was very great, that each settler should have the services of twenty convicts allowed him, who should be supported for two years from the public stores. The inducements held out to officers and soldiers to become settlers, by grants of land, was strongly seconded by every possible encouragement to turn farmers, in order to render the settlement independent of any foreign aid for the supply of the necessaries of life. For this end land was freely granted, though not in large sections, to all classes, free or bond, in or out of the public service, who appeared capable of cultivating it; and convicts who thus exerted themselves received their freedom and a farm, as their reward.

The civil and military officers obtained large tracts; but in 1818 an order was issued to the governor of New South Wales to discontinue the practice of giving land to public officers whilst in the service; this regulation was afterwards relaxed, and public officers were placed on the same footing as settlers, in this respect, which appears to have been strongly advisable, otherwise, the greater

part of the landed property of the colony would have been vested in the hands of emancipated convicts and their descendants, to the exclusion of the educated and higher classes of colonial society. Most of the civil and military officers invested their savings in land; many retired from the service of the crown, and became extensive farmers and graziers, and some of the finest estates in New South Wales, which, both in the style of the mansions and the improvement of the land, would be an honour to any county in England, belong to the families of the civil, military, and naval officers who, in the early and suffering days of the colony, made it their home.

Up to the year 1823, the governor of New South Wales and Van Diemen's Island had the power of granting land to free settlers, and (as a reward to good behaviour) to convicts. When a convict was pardoned, the governor gave, to each male, a grant of twenty acres; if married, twenty more; and to each child in the settlement, ten acres, free from all charge for ten years; after which, a quit-rent of sixpence for thirty acres was levied. To each free settler the governor could make grants of land to the same extent as to convicts, and grant them 100 acres additional. The governor might make larger grants to both convicts and free settlers; but, for such grants, it was necessary to obtain the special approval of the secretary of state. Not unfrequently, also, rations were allowed, from the public stores, to free settlers as well as to the emancipists, until they could raise sufficient food from the soil. The power vested in the governor was extensively exercised. Up to the year 1810, the successive governors of New South Wales had given to individuals, principally to settlers who had been convicts, 177,500 acres, in grants seldom exceeding 100 acres; and it must be acknowledged, that the colony was largely indebted to this class for the production of an annually-increasing quantity of food, which rendered the inhabitants independent of foreign supplies. I visited many of the small farmers in the districts between the Hawkesbury river and Sydney, who had been pardoned by the several governors of New South Wales, or who, on completing their allotted period of servitude, had received free grants of land under 100 acres. In almost every instance I found industry, frugality, and order; in many, a deep regret for the sins of their youth, and an earnest desire that their chil-

dren should be trained in the path of religion. The forest was being gradually cleared around the log-huts; in various places the comfortable brick tenement had been raised, and the neat garden-paled, while the full haggard and the lowing kine gave indications of a comfortable homestead. The free grant of these small tracts of land has been the means, under Providence, of permanently reclaiming many a sinner from the errors of his ways: a piece of land—although covered with a dense forest—which he could call his own, converted him from an avowed enemy of society, into one of its most strenuous defenders; he found, by experience, that honesty was the best policy; and his children learnt, from the lips of their parents, to revere the laws and institutions of the country whose wise and merciful policy produced such beneficial results.

There can be no doubt that land was too freely granted in New South Wales. Up to the year 1823, persons emigrating from England took with them letters from the secretary of state to the governor, directing land to be granted to the intending settler according to his means. Governor Macquarie fixed 2,000 acres as the maximum of grants, unless the secretary of state directed a larger quantity to be given. A number of grants were made of 10,000 to 20,000 acres. Mr. Potter Macqueen, then M.P., received a grant of 10,000 acres, and a reserve of 10,000; Mr. Hart Davis, then M.P., and Mr. H. Davis, jun., 15,000 each; Sir Thomas Brisbane, the marquis of Sligo, and Mr. J. Browne, 10,000 acres each, with reserves of 10,000 more each. (See Parliamentary Committee evidence, 11th July, 1836.) *No condition of residence was attached to these grants.*

In 1824 (1st October), an association, termed the Australian Agricultural Company, received a free grant of *one million acres*, on the following conditions:—After five years, a quit-rent of $1\frac{1}{2}$ per cent. on the land, to be valued at 1s. 6d. per acre—payments every five years; power to redeem, on payment of twenty times the value of the quit-rent to be redeemed; to employ a number of convicts equal to the number of free labourers; one free superintendent to every fifty convicts; no land to be alienated for five years; quit-rent to be redeemed by the employment of a certain number of convicts; and the whole amount of quit-rent to be redeemed, if, within twenty years from the date of grant, it shall appear that the com-

pany have relieved the treasury from a charge equal to £100,000, to be calculated at the rate of £20 for each convict supported during a year.

From 1810 to 1822, during the administration of governor Macquarie, 400,000 acres were granted to free settlers and emancipists. From 1822 to 1831, when the plan of public sale was systematically introduced, the number of acres granted was about 3,386,250. Up to the 31st December, 1834, the total number granted in the colony was 4,163,353 acres. The conditions attached to these grants were various. According to the evidence of Mr. H. S. Kelsey, of the colonial office, before the House of Commons' committee of 1836, lands granted previous to November, 1823, were liable, at the end of ten years, to a quit-rent of 2s. for every 100 acres between November, 1823, and May, 1825; at the end of five years to a quit-rent of 15s. for every 100 acres; and also, during the latter period, lands sold were liable to a quit-rent of 2s. for every 100 acres; lands granted since May, 1825, were liable, at the end of seven years, to a quit-rent of 16s. 8d. per 100 acres. Very little attention, however, was paid to the collection of the quit-rents. When in the colonial secretary's office in New South Wales, I strongly urged the yearly collection of these accumulating sums. In 1832, the amount due for quit-rents was estimated at £16,552; in 1846, at £69,000. In some cases, twenty-five years' quit-rent were due; in others, the arrears amounted to more than the value of the land.

In 1824 regulations for grants of land in New South Wales and Van Diemen's Land were issued by her Majesty's government, which announced that New South Wales and Van Diemen's Island were to be divided into counties, hundreds, and parishes, each parish to comprise an area of about twenty-five miles. A valuation to be made of all the lands in the colony, and an average price to be struck for each parish. All lands in the colony not hitherto granted to be put up for sale at a price to be fixed by the said commissioners; the largest quantity to be sold to one individual, 9,600 acres; the lots to be put up for sale in quantities of three square miles—1,920 acres. Any purchaser who, within ten years after his purchase, should, by the employment and maintenance of convicts, have relieved the public from a charge equal to ten times the amount of the purchase money, would have the pur-

chase money returned, but without interest. The saving to the public on each convict was estimated as equivalent to £16 per annum.

No grants to be made without purchase, unless the governor were satisfied that the grantee had both the power and the intention of expending in the cultivation of the land a capital equal to half the estimated value of it, within seven years. The largest grant, without purchase, to be 2,560 acres; the smallest, 320 acres. A quit-rent of five per cent. per acre upon the estimated value to be fixed upon the land granted without purchase. A nominal quit-rent of a peppercorn to be made for lands purchased in fee-simple. Quit-rents not to be payable on grants for seven years; and in the redemption of the quit-rent at twenty years' purchase, the grantee to have credit for one-fifth part of the sum he might have saved to his Majesty's government, by the employment and maintenance of convicts.

In April, 1827, further instructions were issued from the office of the secretary of state for the colonies, in Downing Street, respecting the terms upon which land would be granted in New South Wales and Van Diemen's Island. Those terms corresponded with the foregoing, and it was stated, that persons who had obtained leave to become purchasers were to send in sealed tenders for the land advertised to be sold, and the highest bidder, if approved by the governor, to become the proprietor. One-fourth of the value of the land, estimated at the time of the grant, to be expended in the cultivation and improvement of the land, within seven years, under penalty of forfeiture. The amount of capital which was to be a criterion of the quantity of land to be granted, was £500 for a square mile—640 acres.

In 1828, Mr. Huskisson, then secretary of state for the colonies, laid before the Duke of Wellington, then first lord of the treasury, a proposition for the establishment of a metropolitan Colonial Land Board; the Duke assented, on condition that the board did not involve the revenues of the British exchequer in additional expense; to which Mr. Huskisson replied, that it would, on the contrary, create an additional source of revenue. Mr. Huskisson evidently had in view the system which had been for some years successfully adopted in the United States, of selling the public lands at a moderate fixed price per acre; formerly, the American government put up their land at two dollars per acre; in 1820 the upset price

was fixed at one dollar and twenty-five cents per acre; it is now, I believe, only one dollar, equal to fifty pence, per acre. The late Sir Wilmot Horton looked to the sale of the crown lands in the colonies as a means of raising a fund to promote emigration.

In 1831 instructions were issued under the royal sign manual (see p. 3, sess. paper of 1831, No. 328), directing, that for the future, land should be put up for auction at a minimum upset price of 5s. per acre. These regulations came into operation in the middle of the year 1831. Under them, the system of reserving land for ecclesiastical purposes was abolished, and the church and school corporation of New South Wales (which, in 1829, received 419,199 acres,) was dissolved. Simultaneously with the raising the price of land to 5s. per acre, all unoccupied lands within the prescribed limits were authorized to be let on lease, in conformity with the following instructions:—

"All crown lands within the prescribed limits will, if applied for, be let by auction, in lots of one square mile, or 640 acres each, as nearly as practicable. Persons desirous of renting such lands, will address themselves to the surveyor-general, taking care to describe accurately the situation of each section applied for. The lands so applied for will be advertised for one month, and the lease of each lot for one year will then be put up to public auction. No lot consisting of less than one square mile, or 640 acres, will be let, except in special cases, which may render expedient a departure from this rule. Each lot will be put up at a rent of 20s. a-year, and the highest bidding (not less than that sum) will be accepted. It is to be distinctly understood that the lands so let will be open for purchase; and in the event of their being sold, must be surrendered by the lessee upon one month's notice."

It was proposed during this year, by lord Howick (now earl Grey), then under secretary of state for the colonies, to apply the net revenue arising from the sale of lands in New South Wales in encouraging female emigration; and during the years 1832—35 there were sent to New South Wales and Van Diemen's Island 2,972 female emigrants, at a cost of £42,070.

During the years 1832, '3, '4, and '5, the colonies began to form a prominent subject of public discussion; political agitation in England, distress in Ireland, and the rapid increase of population, had turned the attention of thinking men to providing a permanent safety valve for the state by a system of continuous emigration from the United Kingdom.

In 1836 (10th June), a select committee of the House of Commons was appointed to enquire into the method of disposing of

waste lands in the colonies; but it is apparent from the list of the committee, and the well known opinions of the witnesses examined, that the evidence to be elicited was such as would be calculated to support a foregone conclusion. None of the members of the committee, except Mr. Roebuck, had ever been in any colony; the principal witnesses were Mr. Edward Gibbon Wakefield, and colonel Torrens, who were then engaged in the laudable effort to found the colony of South Australia on self-supporting principles, but who I think erroneously endeavoured to support their policy by fixing a high price on land; the sums thus received to be employed in conveying labour to the colony. None of the witnesses examined had ever been in Australia; two (captain Wood and Mr. Bryan) had been in Van Diemen's island, —one (Mr. George Stephenson) had been in the United States, and one (Mr. Burnly) in Trinidad. In the report of the committee (dated 10th August, 1836) it is stated, that since the year 1795 the sales of waste lands in the United States had produced the sum of £12,439,049, and that all land is offered for sale by auction at an upset price fixed by the legislature; the committee, however, omitted to state in their report that the price seldom exceeded 5s. per acre. They recommended that the principle introduced by the Earl of Ripon's regulations of 1831, namely, that land should be disposed of by auction at a minimum upset price—should be affirmed by an act of the Legislature, in order to give this principle a character of permanency and stability which it did not then possess. But the committee abstained from stating what that minimum price should be, as it must vary according to the circumstances of each colony, and "can only be determined in any one by the test of experience."

Mr. E. G. Wakefield proposed before this parliamentary committee that a "sufficient price" should be fixed on the colonial lands, but he declined stating what that sufficient price ought to be. Colonel Torrens, who, as chief commissioner of the South Australian association, has carried out some of Mr. Wakefield's views, gave his opinion of the "sufficient price" as at least 40s. an acre.

Mr. G. P. Scrope, M.P., in his valuable evidence before the committee (7th July, 1836), stated that supposing the theory of Mr. E. G. Wakefield to be correct, the practical adoption of the theory would be checked at a very early point for the following reasons:—1st, Emigration would be

checked to New South Wales by demanding a price for land much exceeding the terms on which land of equal fertility could be obtained in the United States. 2nd, That "a high price would prevent the colonists obtaining land: they would be driven to settle as squatters, and appropriate to themselves the occupation or use for a certain period of the land denied them to purchase, except at an extravagant rate." The arguments of Mr. Scrope, and the facts by which they were supported, successfully combated the vague theories put forth by Mr. Wakefield and colonel Torrens. He (Mr. Scrope) entreated the committee to eschew Mr. Wakefield's "leading principle" of colonization as founded on a fallacy, and dangerous, if attempted to be carried into operation, to the very objects in view: he therefore urged them to "adhere in the question of price to the safe and successful example of the United States;"—adding, that he wished to see all the crown lands disposed of after the American system, at not less than a certain minimum price, and the entire proceeds of those sales to be appropriated to an immigration fund, to defray the gratuitous introduction of labourers from the mother country.

In 1836 (12th October), after the committee of the House of Commons had closed its labours, colonel Torrens, as chairman of the South Australian commissioners, addressed a letter to Lord Glenelg, his Majesty's secretary of state for the colonies, objecting to the price of 5s., or any lesser sum, per acre for land in New South Wales and Port Phillip, while 12s. was the minimum price in South Australia, and urging that the labourers sent to South Australia would quit that colony for New South Wales if such an inequality in the price of land continued to exist in two adjoining colonies. Mr. (now Sir James) Stephen in an able reply to colonel Torrens, dated 27th October, 1836, stated on behalf of Lord Glenelg, that the persons who had embarked their property in South Australia knew perfectly well that 5s. per acre was the upset price in the immediately adjacent colonies; that on these terms (comparatively so low) the inducements to occupy large portions of land without licence had been found irresistible; that the "responsibility of the colonists rested with themselves, who must have been prepared for the competition of unauthorized occupants of the soil on the surface of that vast continent, and that it was a danger not concealed from the colonists at the very outset

of their enterprize." It is evident from this letter that Mr. Stephen foresaw the injurious effects attendant on an endeavour to fix a high price for land in New South Wales. He stated that—

"For some years past his Majesty's government have steadfastly enforced the rule, which forbids the alienation of wild lands in New Holland except by sales at a public auction at a fixed minimum price; but they have always perceived that circumstances beyond their control would fix that minimum at a lower point than that which would be selected, if the discretion of the government in this matter were absolutely free and unfettered. In the remoter part of the vast regions comprised within the range of the Australian colonies, the power of the law is unavoidably feeble when opposed by the predominant inclinations of any large body of the people; in such a country unpopular regulations, unless supported by a force either of police or soldiery, irresistible and overwhelming, must become little more than a dead letter.

"Thus, in New South Wales, the squatters (to employ the significant local term) find in the *high upset price of land some of those advantages which a smuggler in other countries derives from a high rate of duty*; their proceedings, instead of being condemned and opposed, are countenanced and supported by the society to which they belong, consequently an extensive territory, at a distance from the seat of government, has been occupied by unauthorised settlers of all classes, by the wealthy not less than by the poor; and, in this systematic violation of the law, each class finds support and encouragement in the example and common interest of its various members. With the most earnest desire to repress the growing evil, the local authorities have experienced the impossibility of making an effectual resistance to the general will."

Lord Glenelg, therefore, through the under secretary of state, Mr. Stephen, expressed his determination of not attempting to raise the price of land in New South Wales to the rate at which theorists wished it to be fixed at in South Australia; and stated that "even the fixed price of 5s. had afforded an irresistible temptation at Port Phillip to the unauthorised occupation of the soil; the governor (Sir R. Bourke) was consequently authorised to relax the rule of price at Port Phillip if he should find it indispensable to check the evil of the unlicensed occupation of the newly explored territory."

In 1837 (15th February) Lord Glenelg sent to Sir R. Bourke, then governor of New South Wales, the correspondence with colonel Torrens, and required a report how far the discretion of the local government had been exercised in fixing a higher rate than 5s. per acre as the upset price of lands supposed to be of peculiar value. Sir R. Bourke informed the secretary of state that in the first place the competition for land in the neighbourhood of Melbourne and Wil-

liams' Town, Port Phillip, had caused the waste lands to be sold at a price which would prevent any further cause for alarm in the South Australian commissioners. With regard to New South Wales, the government rightly considered that competition at public sale would always determine the real value of any allotments, and that the competition which was rapidly increasing would become more active as the colony advanced in wealth and population.

In support of his opinion the governor adduced the following table, showing the average price of crown lands sold in the colony of New South Wales, for the five years ending the 31st December, 1836:—

Year.	Town Allotments, per Perch.		Other Land, per Acre.	
	s.	d.	s.	d.
1832	2	10	6	0
1833	2	4	9	6
1834	6	2	6	8
1835	5	2	5	10
1836	4	2	6	2

The opinions of Sir Richard Bourke on this highly important subject, not only in reference to New South Wales, but to all colonies with waste lands, so clearly indicate the evils which have since ensued from a disregard of those arguments, urged with all the weight of local experience, and enforced by sound reasoning, that I am induced to give them at full length. In testimony of their practical value, Mr. Justice Therry, who had been nineteen years in New South Wales, stated in his evidence before the House of Lords, 9th June, 1848, that governor Sir Richard Bourke, in the despatch of 1837, "anticipated the evils which have since resulted, and which would have been averted if the course he recommended had been abided by."

The governor thus reasoned:—

"If it be objected that such an effective competition as I have described, arising from increased population and wealth, in itself indicates the propriety of raising the minimum price of 1837 over that of 1831, I would observe, that the crown lands now in the market form only a surplus; in many instances they may be justly called a refuse, consisting of lands which in past years were not saleable at any price, and were not sought after even as free grants. As improvement and population penetrate through the colony, such lands begin to acquire a value, and there is a stage in this process in which they are saleable at the present minimum price of 5s. By declining in future to dispose of them at this rate, it by no means follows that they will be sold at a higher. The result may be to retain them for an indefinite time unsold. Such a result, as your lordship appears fully aware,

is the more likely, or rather certain, in consequence of the alternative at the settler's command of wandering without authority or restraint with his flocks and herds over the vast tracts of the interior. A facility in acquiring the actual property of land at a low price is the safest check to this practice, and it may here be observed, that the unauthorised occupiers of remote crown lands do not wholly consist of small flock-owners of slender means, but of the agents and shepherds of the wealthiest colonists residing within the limits of location, who are continually balancing between the opposite motives presented by the cheapness of unauthorised occupation on the one hand, and the desire of adding to their permanent property in land on the other. The extent of their purchases at the government sales corresponds with the prevalence of the latter motive, and it is easy to see that its influence must be weakened in proportion to the augmentation of the upset price.

"But though I am convinced that in almost every case the present value of land is obtained by means of the competition excited by public sales, yet it is possible that an augmentation of the minimum price would have the injurious effect of checking the immigration of persons possessed of small capital desirous of establishing themselves upon land of their own. There are very few new comers who possess sufficient means to purchase, at a price much above 5s., the large tract of land which in this country is absolutely necessary for even the commencement of an ordinary grazing establishment. Again, the inducements offered to retired officers to settle in the colony, by obtaining land at the minimum price, would be much diminished if that price were raised. These officers, both as regards numbers and character, are no small acquisition to the rural population of the colony.

"Apprehending, therefore, that to raise the upset price of crown lands would introduce much of the mischief I have represented; believing also that the influence of competition is becoming daily a more certain safeguard against the sale of any land below its just value; considering further the general impolicy of meddling without imperative necessity with any established system affecting so nearly the foundations of property, especially with one which has been found hitherto to operate so advantageously, I am unable to recommend any change in the minimum price at

which crown lands are, under the present regulations, offered to sale by public auction in New South Wales."

In 1840 Lord John Russell, then her Majesty's secretary of state for the colonies, sent a despatch to Sir George Gipps, governor of New South Wales, containing instructions, dated 23rd May, 1840, under the royal sign manual, respecting the settlement and alienation of waste lands in the colony. New South Wales was to be divided into three districts, northern, middle, and southern. In the middle district, the minimum upset price of land at public auction to be 12s. per acre; in the southern or Port Phillip district, all lands, in future, to be "open to sale at one uniform price" of 20s. per acre, subject to a few qualifications. Lord J. Russell stated, that £1 an acre appeared a reasonable price, adverting to the proceeds of sales hitherto; that it appeared to answer well in the neighbouring colony of South Australia, and that it would probably be advisable to offer lots for sale in sections of 160 or 80 acres; town lots to be at the rate of £100 per acre.

In 1840 (10th December), Sir George Gipps, then governor of New South Wales, forwarded to Lord John Russell a "Memorandum on the Disposal of Lands in the Australian colonies," in which he assumed that 5s. per acre was decidedly too low, as a minimum price, although he acknowledged that the land seldom produced at auction more, and that there was a glut of land in the market at that rate. The governor stated that in 1839 the minimum price was raised to 12s. per acre, and he gave the general results as follows:—

	Years.	Country Lands.			Town Allotments.				Country Lands and Town Allotments.									
		Acres.	Price per Acre.		Sum.	Acres.	Price per Acre.		Sum.	Acres.	Price per Acre.		Sum.					
			£.	s.			d.	£.			s.	d.		£.	s.	d.	£.	
Old Parts of the Colony.	1838	278,323	0	5	4 $\frac{3}{4}$	75,159	185	3	26	17	7	4	3,228	278,509	0	5	7 $\frac{1}{2}$	78,387
	1839	198,198	0	8	1 $\frac{3}{4}$	80,836	231	0	22	29	0	11 $\frac{1}{4}$	6,714	198,429	0	8	9 $\frac{3}{4}$	87,550
	1840	94,878	0	13	1 $\frac{3}{4}$	62,360	513	1	25	69	3	7 $\frac{3}{4}$	35,518	95,391	1	0	6 $\frac{1}{4}$	97,878
	1837	—	—	—	—	—	87	3	20	81	5	8 $\frac{1}{4}$	7,142	88	81	5	8	7,142
Port Phillip.	1838	38,653	0	13	3	25,587	41	1	12	213	11	7 $\frac{1}{4}$	8,826	38,694	0	17	9 $\frac{1}{2}$	34,414
	1839	38,283	1	10	11	61,102	65	1	8	137	19	0	9,008	38,348	1	16	6 $\frac{3}{4}$	70,110
	1840	82,729	1	12	11	136,367	169	2	16	487	16	2	82,732	82,899	2	12	10	219,100

A great stimulus to the purchase of land was given in 1839—40, and '41, throughout Australia generally, but more especially at Port Phillip; it is not, therefore, surprising, that large sums were realized, both for town and country sections. In New South Wales, however, this was not the case, for the

quantity of country land sold greatly diminished, thus—1838, acres 278,323, at 5s. 4 $\frac{3}{4}$ d. per acre = £75,159; 1840, acres 84,878, at 13s. 1 $\frac{3}{4}$ d. per acre = £62,360. It was erroneously supposed, that because land sold at 12s., and, subsequently, at 20s. an acre, in South Australia, therefore the same price

could be realized in New South Wales; but it was forgotten, that independent of delusion at home, and peculiar circumstances, that a system of special surveys was introduced in South Australia, whereby any person binding himself to take 4,000 acres, might require a survey of 15,000, and out of this he might select his portion in lots of not less than eighty acres; so that with such a privilege, he selected all the good and left the bad land. He might also make his selection of a narrow strip with water frontage, thus rendering the back land unavailable for any one else. A gambling system was also introduced, by giving to the purchasers of a certain number of acres, gratuitously, or almost gratuitously, a lottery or raffle ticket for a town or building allotment, which, in some places, was very valuable. Many persons, in England, who bought land in South Australia during the period of the "land mania," have never, to this day, received one shilling in return for their outlay. The memorandum of Sir George Gipps is well nigh unintelligible; he condemns the system adopted in South Australia, as a gambling speculation, depending on a throw of dice; he considers, that "Australia is a pastoral country, and must remain such, for ages;" that "scarcely one hundredth part of the land sold by the government in Australia, is ever purchased for the purpose of being cultivated;" and that "the enterprising colonists who first drove sheep and cattle from New South Wales to South Australia, rescued that colony from ruin;" and yet, after an entire condemnation of the fallacies which were sedulously propagated respecting the "new principle," and the "sufficient price" at South Australia, Sir George Gipps appears to recommend to her Majesty's ministers, in England, the raising of the price of land in New South Wales, as a raw material, above 5s. per acre.

In this memorandum the governor of New South Wales thus correctly described the character of the squatters, and the extent to which squatting was then carried on:—

"A very large proportion of the land which is to form the new district of Port Phillip, is already in the licensed occupation of the squatters of New South Wales, a class of persons whom it would be wrong to confound with those who bear the same name in America, and who are generally persons of mean repute and of small means, who have taken unauthorised possession of patches of land. Amongst the squatters of New South Wales are the wealthiest of the land, occupying, with the permission of government, thousands and tens of thousands of acres. Young men of good family and connexions

in England, officers of the army and navy, graduates of Oxford and Cambridge, are also in no small number amongst them.

"At the end of 1839, the cattle depastured beyond the boundaries was returned as follows, though probably the real quantity was much greater: sheep, 1,334,593; horned cattle, 371,699; horses, 7,088. The number of acres in cultivation was also returned as 7,287."

In 1841 (17th July), the Colonial Land and Emigration Commissioners (T. F. Elliott, esq. and the honourable E. E. Villiers,) addressed a valuable letter to James Stephen, esq., under-secretary for the colonies, in which they stated that they could *not* agree in the recommendation of the South Australian committee, that the upset price of land should be at once raised in South Australia and the other Australian colonies. The commissioners observe, that while they deem the price of land should be progressively increased, until the object of establishing a due proportion between the supply and demand for labour, and between the population and the extent of territory occupied by it, shall have been accomplished; yet, that the extent to which the price of land can be raised, has limits beyond which no authority will avail; and, that just as the smuggler places a limit beyond which the duties of customs cannot be increased, so the squatter would defeat an indefinite increase of the price of land; for, as soon as the consideration demanded by government for granting a title became extravagant, persons would prefer the course of taking land without a title, and bearing the risk.

In the annexed paragraph, the commissioners clearly foretold the disadvantageous results attending an increase of price above the 12s. then prevailing in New South Wales:—

"It appears to us, that as to the possible effect of a low price in withdrawing persons from labouring for hire in the colony, there may be some misapprehension as to the state of facts. In North America, where lots were of small size, and their value was to be realised by force of human labour only, it is not questioned that too great a facility of acquiring land withdrew large numbers from the class of labourers. But in the Australian colonies, where land requires to be in large quantities, for the principal use to which it is turned, and where also the profit to be derived from it depends not upon mere human toil, but upon the acquisition and rearing of stock, requiring a considerable further outlay of capital, it may well be doubted whether the same effect is to be apprehended. We certainly do not remember to have seen it mentioned in any official accounts from these colonies, that land has been acquired by persons in the condition and with the means of labourers; and Sir George Gipps, in the memorandum which

forms one of the papers now under consideration, mentions, that it is 'rarely advantageous in any part of Australia for a newly-arrived emigrant to become a proprietor of land, unless his capital is considerable.' This would seem to imply that the temptation held out by land to people of small means is not very considerable. The truth, perhaps, is, that *various other causes, besides the price of land, must govern the usual rate of wages.* It is, we believe, generally understood, that where the capital which can be profitably used in employing labour is very large, in proportion to the number of labourers that can be obtained, wages will be high; and this will continue equally true, whatever might be the existing land regulations. We fear, therefore, that if we were to undertake progressively to increase the price of land until labour should be abundant, and employment as much divided as in old countries, *we might possibly extinguish the land sales before we should have reduced wages; that we might seriously diminish the resources for producing the great staple of the Australian settlements, and perhaps have engendered an extensive system of unauthorized squatting.* We feel the force of this apprehension the more, when we advert to the opinion of the committee, that after once a minimum price has been declared, it ought not to admit of being lowered, except by an act of the British Parliament."

In 1842, the system of sale by auction was resumed throughout the colony, at a minimum upset price of 12s. per acre for country lands, with liberty to select portions not bid for at the upset price.

In a speech delivered in Council by Sir George Gipps, the governor of New South Wales, on 9th September, 1842, he used these remarkable expressions:—"I do not advocate the putting the squatter on a par with the purchaser of crown land; to do this, would be effectually to nullify all the regulations which have been introduced for the disposal or sale of land, since land began to be of any value in the colony. * * * So obviously does the squatting system act to prevent the sale of crown lands, that the late secretary of state, in a despatch which has been laid before the Council (dated 20th June, 1840), pointed out the propriety of raising the price of a licence to depasture stock beyond the boundaries, to five or six times its present limit." It must, however, be admitted, that when the government adopted the theory of raising the price of land beyond its real value, the colony would, to a great extent, have been ruined, but for the squatters, whose exertions have increased the quantity of stock, and greatly multiplied the exportable produce of the settlement.

In 1843, the minimum price was raised to *twenty shillings* per acre, by an act of the Imperial Parliament, (5 and 6 Vict., cap. 36,) with liberty to select, at the upset price, country portions put up to auction and not

bid for, or on which the deposit had been forfeited. The land was offered for sale, in quantities of not less than a section, or one square mile = 640 acres. In 1843, a select committee of the Legislative Council of New South Wales was appointed, to enquire into and report upon the upset price of land. In the same year, and in 1845, "immigration reports" were laid before the Council. In the resolutions and petitions of the Council, founded on these several reports, urgent protests were made against the continuance of a policy which had been productive of the disastrous results of annihilating the land fund, and simultaneously depriving the colony of capital and labour, by which a series of social revolutions, and an unparalleled depreciation in the value of property were, in a great measure, to be attributed. It was stated, in this year, that about 5,000,000 acres had then been alienated from the crown in New South Wales; of these, about 3,500,000 acres had been granted, and about 1,000,000 acres had been sold, at a price of about 5s. per acre.

By an order of her Majesty in Council, dated London, 9th March, 1847, the lands of New South Wales were divided into three classes, according to their situation, to be denominated respectively—(1.) the *settled*; (2.) the *intermediate*; and (3.) the *unsettled* districts. The *first* comprised the settled and proclaimed counties of 1st January, 1838, and the counties of Macquarie and Stanley; also lands within three miles distance from any part of the sea coast, or two miles from certain parts of the rivers Glenelg, Clarence, and Richmond, or ten miles from the towns or townships of Portland, Alberton, Eden, Bathurst, Wellington, Macquarie, Ipswich, and a town at the head of the navigation of the Clarence river. The *second* comprehended the counties to be proclaimed on or before 31st December, 1848; and the *third*, all the other lands in the territory of New South Wales. [In this enumeration, the references to Melbourne and the Port Phillip districts have been omitted, as this portion of Australia is to be formed into a distinct colony.]

Under this order, the governor is empowered to grant leases or runs of land in the unsettled districts, for any term not exceeding fourteen years' duration, for pastoral purposes, with permission for the lessee to cultivate so much of the land in the said run as may be necessary to provide grain, hay, vegetables or fruit, to the amount

required for the use of the family and establishment of the lessee, but not for sale or barter. The rent to be proportioned to the number of sheep or cattle which the run may be enabled to support; each run to be capable of carrying at least 4,000 sheep, or an equivalent number of cattle, and not in any case to be let at a lower rent than £10 per annum, to which £2 10s. per annum shall be added for every additional 1,000 sheep, or equivalent number of cattle, which the run may be capable of carrying. A commissioner of crown lands to estimate the capabilities of the run. During the continuance of the lease, no person but the lessee to be suffered to purchase any of the run; but he to be allowed to buy the whole, or portions of not less than 160 acres, at a price of not less than 20s. per acre. On the *intermediate lands* the governor may grant leases as above for not more than eight years; but at the end of each successive year of the lease, these runs may be offered for public purchase, subject to sixty days' notice to the lessee. In the *settled districts* the governor may issue grants or depasturing leases for one year, without interference as to time of disposal of said lands by sale or lease.

In 1847 (11th September), a select committee of the Legislative Council of New South Wales on *immigration*, stated, that "the land fund—the source from whence any amount of expenditure incurred in immigration might have been defrayed, has been annihilated, in consequence of the determination to carry out the system of Mr. E. G. Wakefield; and the remonstrances of the colony against this ruinous system

have been unheeded or misunderstood." The committee state, that—

"For a series of years the growth of the colony was uniform, progressive, and uninterrupted. From 1833 to 1840, the sum realized by the sale of the waste lands was upwards of £1,000,000, and by the expenditure of this amount 80,000 souls were introduced. Under this system, the population became more than doubled in a period of eight years. In 1839, it was the policy of the imperial government to raise the upset minimum price of land from 5s. to 12s., and subsequently to £1 an acre. This act may be regarded as one chief cause of the disasters with which the colony has since been visited, and of its present depressed condition. From £300,000 a-year the land revenue fell to £8,000, and immigration ceased; the sources from whence it had been defrayed, having been thus suddenly arrested."

In 1847 (23rd July), a select committee, consisting of ten members of the Legislative Council of New South Wales, was appointed to inquire into and report upon what ought to be the minimum upset price or prices of land in the various counties and districts of New South Wales. On 27th September, 1847, the committee made a report, of which the following is an abstract. All the witnesses examined, whether favourable or unfavourable to the maintenance of a high minimum price, agreed that 20s. does not in any degree represent the exchangeable value of an acre of land in New South Wales; and that, therefore, the declaration of the Imperial Parliament, that land shall not be sold till it realises £1 per acre, is a declaration that land shall not be sold until it realise more than it is worth; or, in other words, that except in particular instances, land shall not be sold at all. In confirmation of this statement, the following table is adduced:—

Prices of Crown Lands and Quantities Sold from 1837 to 1846, both inclusive.

Year.	5s. per acre, Country.	12s. per acre, Country.	20s. per acre, Country.	Upwards of 20s. per acre.		Special Surveys, in Acres.	Total Acres Sold.	Total Amount for Lands sold.
				Town.	Country.			
1837	368,483	—	—	212	—	—	368,695	£121,962
1838	315,059	—	—	228	30	—	315,318	128,865
1839	249,896	30,218	2,664	2,785	351	—	285,915	166,713
1840	68,873	111,720	2,058	5,525	1,291	—	189,468	324,072
1841	—	16,430	3,310	248	153	66,199	86,341	92,636
1842	—	4,898	1,340	170	471	15,023	21,903	18,312
1843	—	616	3,205	157	717	121	4,817	12,205
1844	—	—	3,822	245	190	—	4,259	9,174
1845	127	—	4,440	1,754	945	—	7,267	18,025
1846	—	103	2,841	282	3,791	—	7,018	27,700
1847	. . .	. . .	. . . No	detailed	returns.	. . .	. . .	. . .
1848								
1849								
1850								
Total	1,002,440	163,985	23,683	11,611	7 942	81,343	1,291,006	£919,669

Note.—Roods and Perches, and Shillings and Pence are excluded

From the foregoing table the committee adduced the facts—

“That the sum realised by sales of land in 1846 is less by £3,000 than one-fourth of the sum realised from the same source in 1837. It will also be observed, that in the five years which have elapsed since the raising of the minimum price to £1 an acre, the whole sum realised by land sales is not quite £80,000, or two-thirds of the sum realised in the single average year 1837; and the whole number of acres sold about 45,000, or less than one-eighth of the number sold in 1837. The result is more strange, when it is observed, that in 1837 the population of the colony amounted to 85,000 persons, while, in 1846, the population amounted to upwards to 196,000. Thus by unwise legislation has the permanent settlement been retarded in proportion as the demand for it has increased; and thus is the fallacy, that land can be made saleable at this price by the introduction of population, practically refuted. But it has been said by Sir George Gipps, that it is to the insolvency, which was unfortunately so general a few years ago, and not to the high minimum price, that the cessation of land sales is to be attributed. If so, we may expect to find the same paralysing influence extended to all markets as well as the land market. The comparison of 1837 with 1846 will completely show the fallacy of this suggestion. In 1837 the value of exports from the colony was £760,000. In 1846, the value was £1,481,000, or nearly double. In 1837 the ships entered inwards were 400, of the burden of 80,000 tons. In 1846 the ships entered inwards were 767, of the burden of 141,000 tons. In 1837 the proceeds of sales by auction were £321,000; in 1846, £414,000. In 1837 the coin in the treasury, military chest, and banks, was £427,000; in 1846, £827,000. Thus, while our exports, our shipping, our circulating medium, and our population have doubled; while the proceeds of sales by auction have increased one-fourth, the proceeds of sales of land have decreased by more than three-fourths.”

The inference deduced from these facts by the committee is that while—

“The producer of colonial exports is content to sell his commodity at the price which it will bring, the shipowner looks only for the current rate of freight; the importation of capital is regulated by the rate of exchange; but the government, the great proprietor of land, refuses to regulate its dealings by these principles, repudiates the doctrine of supply and demand, and insists upon holding this commodity, of which it has practically the monopoly, till it realise a price, of obtaining which no practical man can see the probability or even the possibility. Thus, while every other branch of industry is carried on with the greatest activity and success, the settlement of the country, to which they ought all to be considered as subsidiary, stands still, and the mind is astonished by the anomalous spectacle of a colony active, enterprising, and energetic in all things, except the one alone for which it was founded—colonization.

“It seems impossible to reconcile this system not only to any views of sound policy but to any policy at all. If the government regard these lands as a mere vehicle of revenue, as the means of raising the largest possible sum, narrow and unstatesman-like as such a view may be, this is not the way to carry it out. The figures above quoted show that the price is so exorbitant, that every other element of wealth in

the country may double and leave it still a virtual prohibition. How often this multiplying process is to be repeated before the pressure of population and the increase of wealth will render these lands saleable at £1 an acre it is impossible to say; but to judge by the moor lands of England, and the bogs of Ireland, the period is yet extremely remote. It must also be remembered, that even if the government should succeed in selling land at £1 an acre twenty years hence, for which now only 5s. could be obtained, the government, allowing for compound interest at the rate of interest which money now commands in the colony, is considerably a loser; add to this, that by destroying the land fund, the government is not merely foregoing a revenue which would be cheerfully paid and easily collected, but it is destroying future revenue by arresting the influx of that labour from which land derives so much of its value. It is not merely refusing to sell a commodity, but it is depreciating that commodity for ever. The supply of land which may become saleable by the government is, for all practical purposes, infinite. What quantity will become saleable, depends upon the increase of population. Government, therefore, as a mere dealer in land, has a direct interest in selling so much of it as will keep the tide of population continually flowing towards its yet unsold possessions.

“It is also the interest of government to attract capital. In this also it has signally overreached itself. The principle of a uniform fixed price contains in it this objection, that that price must be tolerably high, since upon it alone the government relies to protect its interests, but it has the countervailing advantages of certainty of amount and facility of operation. The principle of sale by auction has not these advantages, but it offers to the capitalist the attraction of referring not to any arbitrary standard, but to fair competition to fix the value. The government has rejected all that is attractive in each of these systems, and retained only what is repulsive. Enough of the fixed price is retained to make the purchaser sure that he will not get the land cheap; enough of the principle of competition to make him uncertain whether he shall get it at all.

“The facilities of steam and railway communication are gradually drawing mankind together, and countries possessing wild lands for sale, are beginning to enter into competition with each other. It is becoming daily more impossible to regard this as an isolated question. In determining the price of land, the competition of other countries ought not to be left out of sight. At the Cape of Good Hope land can be obtained for one-tenth, in Canada for one-fourth, and, as it appears recently, in the United States, for one-fortieth of the sum demanded for a like quantity here. In utter defiance of the principles of political economy, it is expected that persons will give for our poor and inaccessible land four, five, ten, or forty times the price at which nearer and more accessible land may be obtained. It is assumed that one acre of land in Australia equals in value four in Canada, five in the United States, ten at the Cape of Good Hope, and forty in the territory recently ceded to the United States by the Chacktaw Indians. Your committee apprehend, that as regards the greater part of the lands of this colony, it is perfectly immaterial whether the minimum price fixed be £1 or £20 an acre. The former price is shown, by reason and experience, to be utterly unattainable, and the latter is no more.

“Your committee would wish to be understood as

by no means undervaluing the great advantages derived by the colony from pastoral pursuits, but they are desirous of expressing their opinion that the home government, by prohibiting the sale of land, has given an undue stimulus to those pursuits, and undue discouragement to agriculture and settled industry. The prohibition of the purchase of land has aggravated that tendency to dispersion which it was designed to counteract. The true policy, in the opinion of your committee, is neither to stimulate nor check this tendency to dispersion, which is the natural precursor of that state of society in which the tendency to concentration arises. Unhappily, the government has not observed this rule. In its anxiety to concentrate the population, it has placed a price on land which rendered it impossible for those who occupied it to occupy as purchasers. The occupation has been conceded, the proprietorship has been withheld, and thus has the industry of the colony been forced into the channel most consistent with occupation without title, and the policy which ambitiously aimed at forcing the colonists prematurely to become villagers and agriculturists, has resulted in compelling them to become shepherds and herdsmen. Had the prohibitory price thus imposed been the result of a sincere though mistaken conviction, your committee, while deprecating its impolicy, could not have murmured at its injustice. But it is now notorious in the colony, and can be proved by unquestionable evidence, that it was not with a view to the welfare of New South Wales, but of South Australia, that this obnoxious law was passed. Colonel Torrens and his brother commissioners, the founders of the South Australian colony, felt that it would be impossible to obtain £1 an acre for land there, while land of the same quality could be obtained at 5s. an acre here. They felt that whatever were the merits of their scheme, it would not bear the test of the free-trade principle of competition, and they sacrificed, without remorse or hesitation, the present and actual interests of the older colony, to the future, and, as it has turned out, visionary prospects of the younger. Thus it happens, that 200,000 persons are impoverished, that their interests may not stand in the way of the imaginary interests of 25,000; and while colony after colony has been emancipated from the £1 an acre system, New South Wales has been unable to obtain her deliverance, precisely because, to her, that deliverance would be most valuable. Van Diemen's Land is of too small extent—New Zealand is too distant—to impair, by their competition, the working of the £1 an acre system in South Australia. If the land of New South Wales were rich, the continuance of the price would be a matter of indifference; if the land were small in quantity, the reduction of the price would be unimportant; it is the great quantity and poor quality of the land—the very causes which render the high price ruinous to New South Wales—that constitute its principal attractions in the eyes of the South Australian commissioners."

From a return made to government, up to June 30th, 1836, it appears that the land comprised within the then nineteen counties of the colony, was upwards of 25,000,000 acres, of which only about 5,000,000 acres had been alienated; showing that there was, consequently, abundance still left within the settled districts for cultivation, if required. The best lands had been selected by those

who received grants, the next best put up to sale by government at 5s. an acre; after selections had been made for several years at this price, the third best were offered at 12s. an acre; and, finally, the refuse or remainder of these grants and sales was put up for sale by auction at 20s. per acre. (Evidence before Legislative Council, 14th August, 1847.)

After these forcible arguments, the Legislative Council committee proceed to show, with a warmth which is, perhaps, only too excusable, that it would have been happy for the colony, if the ruin of her land fund—the dispersion of her people—the stoppage of immigration—and the dissemination of a just spirit of discontent, had been the only results of this high minimum price. A party arose in the colony, a class termed "squatters," who, forbidden by the policy of the government to buy land, were forced to occupy it, and did so, under the authority of the government, on a *lease* of 1d. per acre, until the lands thus occupied were *purchased* at £1 per acre. Hence, the squatters—men of intelligence, education, property, and good family in England, who had made New South Wales their home—began to feel that they had a vested interest in maintaining the prohibitory price, as a guarantee that their occupation would not be disturbed; the result is, that "the land possessions of the British crown in New South Wales have been in a manner *alienated*." The settlers object to the land-orders which authorise leasing at 1d. per acre, because they confiscate the lands of the colony; the squatters approve of them, because they see no limit to the term of their occupation; under them, temporary occupation is consequently equivalent to permanent alienation—thus the system has led to grants of land on the most lavish and extravagant scale. By the process now in operation, it is alleged that all the desirable land within the nineteen counties, and *beyond the settled districts*, viz., about 1,800,000 acres, have been, in reality, bestowed on about 1,800 persons, at the rate of 100,000 acres per head, in a country where there is one inhabitant to every 100,000 acres, and has coupled with this premature appropriation, a regulation prohibiting agriculture. Thus, it is asserted, dispersion is enforced; co-operation, the division of labour, religious and secular instruction, are all out of the question; landed property is accumulated in the hands of a few to the

exclusion of the many; and the high minimum price of land (20s. per acre) has operated as a bar to the natural and secure investment in the soil of the surplus capital of the colony, hazardous speculation has been consequently encouraged, and capital forced into other and less legitimate channels. The opponents of the high minimum price of land do not deny the benefits arising from the sale of waste lands; or that a sum of nearly £1,000,000 was raised by such sale in New South Wales, in ten years, whereby 50,000 immigrants have been introduced into the colony; but they contend, that of the gross proceeds of the land sales (£920,000), £835,000 were received during the first five years of the period, when the price of land was under 20s. an acre, and but £85,000 during the second period of five years, when the minimum price was 20s. an acre; thus, if the sum raised from land has been the means of introducing 50,000 immigrants, 46,000 have been introduced by land put up under 20s. an acre, and 4,000, only, by land put up at 20s. an acre. In other words, had the price remained unaltered, the colonists might have raised £2,000,000, instead of £1,000,000, and introduced 100,000 immigrants instead of 50,000. It is in evidence, that no land has been purchased for grazing purposes at 20s. an acre; according to some witnesses, 10s. per acre would be a fair price for arable, and 5s. per acre for grazing land. According to Mr. De Salis, 2s. 6d., and a rent equivalent to four per cent. would be a proper valuation. Mr. Ogilvy thinks 1s. an acre sufficient. There is much land on which a rabbit could not feed, and 3s. an acre would be gladly received for 10,000 acres in the county of Macquarie. Many large tracts of a deep dark rich soil are covered with dense forests, which are not likely to be cleared for years to come.

Mr. Justice Therry, in his evidence before the House of Lords (9th June, 1848), being asked to what he attributed the considerable falling off in the land sales of New South Wales, of late years, answered—

“Principally I should attribute it to the minimum price of land being £1 an acre, and to the great extent to which, in consequence of this price, the squatting system has extended, as well as to the great facility afforded for the occupation of land without purchase; that naturally prevents the sale of land. If a person can occupy and use land without buying it, and buying too at a price beyond its value, it is plain he will not purchase it.”

The witness proceeded to say, that so far

from 20s. upset price for land having a tendency to secure the concentration of the population, as was alleged would be the case, it had quite the contrary effect, and had promoted dispersion, by a system which operates as a prohibition upon the sale of land. This experienced judge fully corroborated the statements of the Legislative Council Committee, and asserted, that “the squatters have an occupation which they consider as almost equivalent to the proprietorship of the soil: for all practical purposes, they have an ownership of the land almost as if they had purchased it.” Four acres to one sheep, would entitle the squatter, having the smallest required number of sheep (4,000), to 16,000 acres of land; and it must be evident he could not afford to pay 20s. an acre, or £16,000, for mere pastoral purposes.

In 1848 (29th March), the governor issued regulations for the occupation of crown lands *within the settled districts*; viz.—*First*. That holders of purchased lands within those districts may depasture stock on vacant crown lands immediately contiguous to their respective properties, but that they shall only possess a *commonage* right, to be enjoyed alike by all the holders of adjacent purchased lands, and may not erect any hut or building, or clear, enclose, or cultivate any portion thereof. *Second*. That sections of not less than 640 acres will be let, with exclusive right, for one year, at a rent of not less than 10s. per section, for pastoral purposes only. Leases not assignable, or lands to be sublet. Wood, excepting cedar, may be cut for fencing stock-yards, for fire-bote, or domestic uses. Lands open to purchase under the ordinary regulations: lessee to receive a notice of one month. The secretary of state for the colonies has authorized the local government of New South Wales to raise a loan of £100,000 for emigration purposes, on the security of the land revenues of the colony, but declined to alter the upset price of 20s. per acre for land. It is rightly deemed that any alteration in price ought to apply to all the southern colonies; and her Majesty's government propose to leave the settlement of this question to the United Assembly of all the Australasian colonies. It will, however, be a very difficult matter, owing to the interests which have grown up under the present system.

The quantity of land sold, and the proceeds thence derived, in New South Wales and Port Phillip, and the amount derived

432 LAND SOLD AND MONIES RECEIVED IN N. S. WALES SINCE 1831.

from squatting licences, are thus shown since 1831 :—

Year.	Number of Acres Sold.	Purchase Money.	Squatting Licences.
		£	
1831		2,597	—
1832	20,860	12,509	—
1833	29,001	24,956	—
1834	91,399	41,484	—
1835	271,947	87,097	—
1836	389,546	123,049	3,680
1837	370,376	117,583	4,780
1838	316,160	115,825	6,280
1839	272,620	166,578	11,675
1840	189,787	317,251	13,300
1841	85,776	93,387	15,701
1842	10,673	19,444	16,255
1843	5,227	11,664	19,823
1844	4,260	9,016	32,031
1845	7,747	22,821	38,943
1846	7,683	30,183	42,749
1847	28,726	76,962	43,075
1848	21,480	41,919	46,903
1849}			
1850}		No returns.	

In 1848 the whole quantity of land sold in the New South Wales district was only 3,472 acres, and the sale proceeds £7,384; in the Port Phillip district, 18,007 acres, proceeds, £24,030. The revenue derived from squatting licences, in 1848, was—*within*

the settled districts, New South Wales, £1,116; Port Phillip, £383 = £1,549; *without* the settled districts, New South Wales, £26,490; Port Phillip, £18,863 = £45,353.

The subjoined table shows by whom, and the period, the government of the colony was respectively administered since its foundation on the 26th January, 1788 :—

	From	To
Captain Arthur Phillip, R.N.	Jan. 26, 1788	Dec. 10, 1792
Captain Francis Gross (Lt.-Gov.)	Dec. 11, 1792	Dec. 14, 1794
Captain Paterson, New South Wales Corps (Lieut.-Gov.)	Dec. 15, 1794	Aug. 6, 1795
Captain Hunter, R.N.	Aug. 7, 1795	Sept. 27, 1800
Captain P. G. King, R.N.	Sept. 28, 1800	Aug. 12, 1806
Captain W. Bligh, R.N.	Aug. 13, 1806	Jan. 26, 1808
Major-gen. Lachlan Macquarie.	Jan. 1, 1810	Dec. 1, 1821
Major-gen. Sir T. Brisbane, K.C.B.	Dec. 1, 1821	Nov. 30, 1825
Colonel Stuart, 3rd Reg., or Buffs (Lieut.-Gov.)	Dec. 1, 1825	Dec. 18, 1825
Lieutenant-gen. Ralph Darling	Dec. 19, 1825	Oct. 21, 1831
Colonel Lindesay, C.B. (Lt.-Gov.)	Oct. 22, 1831	Dec. 2, 1831
Major gen. Sir R. Bourke, K.C.B.	Dec. 3, 1831	Dec. 5, 1837
Lieutenant-col. Kennett Snodgrass (Lieut.-Gov.)	Dec. 6, 1837	Feb. 23, 1838
Sir George Gipps	Feb. 24, 1838	July 10, 1846
Sir M. C. O'Connell.	July 11, 1846	Aug. 2, 1846
Sir Charles Augustus Fitzroy	Aug. 3, 1846	—

Note.—Captain Bligh was suspended as Governor on the 26th January, 1808, and from that period to the 28th December, 1809, the government was successively administered by lieutenant-colonel G. Johnstone, lieutenant-colonel Foveaux, and colonel W. Paterson, all of the New South Wales Corps, afterwards 102nd Regiment.

CHAPTER II.

TOPOGRAPHY, PHYSICAL ASPECT, MOUNTAINS, RIVERS, AND HARBOURS, COUNTIES, GEOLOGY, SOIL, MINERALOGY, CLIMATE, AND DISEASES.

NEW SOUTH WALES (so called by captain Cook, from its fancied resemblance to the South Wales of England,) occupies the eastern portion of the Australian continent; its northern and western limits are not yet definitely assigned; on the east it is bounded by the South Pacific Ocean, and on the south, by the province of Port Phillip or Victoria. For the reason just mentioned, it is at present impossible to state its area.

Physical Aspect, Mountains and Rivers.—The general features of the surveyed districts are alternate hills and valleys, mountains and plains. The “mountain belt” of Australia, already referred to (p. 370), is known in different parts of the province under distinct denominations, viz., as the Blue Mountains, in the vicinity of Sydney;

Liverpool Range, in its northerly, and the Australian Alps, in its southerly extension. This lofty ridge, which runs nearly parallel to the coast, at a distance of thirty to fifty miles, separates the waters that flow towards the sea from those that have an inland course; its mean altitude is estimated, by Count Strzelecki, at 3,500 feet above the sea. The same accurate observer states the average fall of the coast or easterly rivers at forty-eight feet in every mile; the average slope produced by the transversal spurs being ninety-six feet; and the average fall of the westerly waters, at nine feet in every mile; that of the country within seventy-two miles from the crest of the dividing range being twenty feet. The intervening space between the mountains and the sea is

occupied by a gently undulating surface, intersected by water-courses; in some places well wooded, in others covered with dense scrub, and gradually rising to the westward in groups of isolated hills, or small and broken ranges, branching out from the ridge of high land, which, winding from north-east to south-west, forms a continuous and clearly defined line visible against the horizon as far as the eye can reach. In 30° S. lat. this chain divides the sources of the river Peel, running to the westward, from those of the Hastings, flowing north-east, towards Port Macquarie; further to the south, one of its eastern spurs separates the river Manning from the river Hunter, after which, assuming a westerly direction, it divides in its windings the tributaries of the Hunter from those of the Peel. This portion of the chain, distinguished by the name of Liverpool range, is crowned by several peaks of greenstone, whose bare and unshapen tops attain an elevation of 4,700 feet. From two of these, Mount Oxley and Mount M'Arthur, the view is extensive and very pleasing; to the westward of them, at the point where it divides the river Goulbourn from the Talbrager, the chain turns suddenly to the south-east, but resumes its south-westerly direction at a locality rendered remarkable by the peaks of Coricudgy and Payan, and the sources of the Colo and Cudgegong. At Cullenbullen the chain is granitic, and throws off a remarkable basaltic spur to the eastward, whose numerous and intricate ramifications render the Blue Mountains so difficult to explore, and even to approach. Mounts Adine, Clarence, King George, and Tomah, crown the northern and loftier branch; mounts Hay and King's table land, the southern. "Between these ranges," says Count Strzelecki, "lie yawning chasms, deep winding gorges and frightful precipices. Narrow, gloomy, and profound, these stupendous rents in the bosom of the earth are inclosed between gigantic walls of sandstone rock—sometimes receding from, and sometimes frightfully overhanging the dark bed of the ravine, and its black silent eddies, or its foaming torrents of water." "Everywhere," he adds, "the deep recess is full of danger, and the issue almost impracticable. At the foot of Mount Hay, the river Grose flows through a sandstone ravine, the perpendicular depth of which is 1,500 feet." To return to the main range—at the part from whence this spur branches out, it is composed of sienite

and granite; thence extending for a few miles to the south-west, it gives rise to Cox's river, and forms the Walerawang and Clwyd valleys; it then takes a south-east direction, and is known by the name of the Honeysuckle range; the mean elevation of its crest is 4,050 feet; twenty-five miles beyond, bending again to the south-west, it rises to 4,500 feet, its character alters, and the eye rests on naked sienitic peaks, instead of richly wooded greenstone summits. A spur shoots off to the northward, which, in its windings, separates the river Macquarie from the Abercrombie, while the chain itself becomes lower, less precipitous, and more wooded. At Mount Fitton, about the source of the Wollondilly, and at the head of Lake George, this character again somewhat alters. At the last named locality, a westerly spur, composed alternately of serpentine and porphyries, divides the tributaries of the Murrumbidgee from those of the Lachlan, winding its way through a very broken country. Further on, beyond Lake Bathurst, another branch stretches to the north-east, but the chain continues its southerly course for about sixty miles; then changing again to south-west, it assumes a bolder aspect, its greenstone and sienitic crest at times resembling Alpine table-land; and others, rising in clearly defined and dentiform summits, capped here and there by snow, even in the midst of summer. The remarkable spurs which shoot out from both sides of the ridge at this point, are distinguished by the same marked features; that which, passing to the eastward, flanks the river Shoalhaven from its source to its mouth, renders the whole track over which it passes broken and intricate; and that, which running in an easterly direction, winds between the rivers Murrumbidgee, Coodrabidgee, and the Doomut, is of very striking formation, its lofty ridges enclosing the channels of the rivers just mentioned, whose sources are marked by a cluster of broken peaks. We now arrive at that portion of the range denominated the Australian Alps, of which, however, only one remarkable eminence is included in the limits of New South Wales, that one named Mount Kosciuszko by its explorer, Count Strzelecki, is described by him as one of those few elevations, the ascent of which, far from disappointing, presents the traveller with all that can remunerate fatigue. Its altitude of 6,500 feet, raises it above the adjacent mountains, and the view from its summit

embraces 7,000 square miles. Beneath the feet, looking from the very verge of the cone downwards almost perpendicularly, the eye plunges into a fearful gorge 3,000 feet deep, in the bed of which the sources of the Murray gather their contents, and roll their united waters to the west.

No known volcanic mountain exists in New South Wales, unless we reckon as such an eminence named Mount Wingen, situated near the sources of Hunter's River, where the process of combustion was, in 1818, discovered to be going on. Two visits were made to it in 1830 and 1831, by the Rev. C. P. N. Wilton (then chaplain at Newcastle), who published, in the *Australian Almanac* for 1832, the interesting account of which the following is an abstract:—

"Mount Wingen is situated on the south-eastern side of the dividing range which separates the lands of Hunter's River from Liverpool Plains, in $31^{\circ} 54'$ S. lat., $150^{\circ} 56'$ E. long.; and the elevation of the portion of it under the process of combustion cannot be less than from 1,400 to 1,500 feet from the level of the sea. At the period of my first visit, in the beginning of last year, this comprehended parts of two declivities of one and the same mountain, composed of compact sandstone rock. The progress of the fire had previously been down the northern and highest elevation, and it was then ascending with great fury the opposite and southern eminence. From the circumstance of its being thus in a hollow between two ridges of the same mountain, a former visitor was probably induced to give the clefts in the mountain the appellation of a crater; but, the fact is, the rock, as the subterraneous fire increases, is rent into several concave chasms of various widths, of which I had an opportunity of particularly examining the widest. The rock, a solid mass of sandstone, was torn asunder about two feet in width, leaving its upper and southerly side exposed to view, the part so torn asunder having slipt down, as it were, and sunk into a hollow, thus forming the concave surface of the heated rock. On looking down this chasm to the depth of about fifteen feet, the sides of the rock were perceived to be of a white heat, like that of a lime-kiln, while sulphureous and steamy vapours arose from the aperture, amidst sounds which issued from a depth below, like blasts from the forge of Vulcan himself. I stood on that portion of the rock which had been cleft from the part above,

and on hurling stones down into the chasm, the noise they made in the fall seemed to die away in a vast abyss beneath my feet. The area of the mountain, over which the fire was raging, was about an acre and-a-half in extent. There were throughout it several chasms varying in width, from which are constantly emitted sulphureous columns of smoke, accompanied by brilliant flame, the margins of these being beautified with efflorescent crystals of sulphur, varying in colour from the deepest red orange, occasioned by ferruginous mixture, to the palest straw colour, where alum predominated. A black, tarry, and lustrous substance—a sort of bitumen—abounded on the edges of several of the clefts. Specimens of this were with difficulty obtained, from the intense heat under foot, and the suffocating quality of the vapours emitted from the chasms. No lava or trachyte of any description was to be met with, nor was there any appearance of coal, although abounding in the vicinity. The mountain has evidently been on fire for a great length of time, several acres above the part now under combustion, on which trees are standing of a great age, having, as it were, been steamed, and many of the stones upon it bearing the appearance of vitrification. The fire is still raging, and will probably continue to do so with increasing fury. Materials from beneath from time to time become ignited, whether by electricity, or other unknown cause, and the expansive power of the heat and steam, shiver and split into huge masses the solid rock of sandstone, and thus form continued chasms. The sulphureous and aluminous products of the mountain have been successfully applied in the cure of the scab in sheep."

About four miles along the shore from Newcastle, towards Red-head, the cliff was also observed, in 1828, to be on fire, evolving sulphureous vapours; and a beautifully crystallized mineral, which appeared, on examination, to be muriate of ammonia intermingled with sulphur, was collected from the margin of the crevices. This fire, however, in 1830, became extinct;—unlike that on Mount Wingen, of his second visit to which Mr. Wilton thus speaks:—

"The fire, since the period of my former visit, had, I found, been by no means inactive, having extended over a surface exceeding two acres, and was now raging with increased fury up the eminence to the S. and S.S.W., and also on the hitherto

extinct portion of the mountain—the northern elevation. There were still most splendid crystals of sulphur on the margins of the more extended crevices, where the fire was burning with a white heat, and of ammonia on those of the less, from both of which suffocating fumes were incessantly evolving. The fire continued roaring beneath, and stones thrown down into the chasms resounded to a great depth in an interior abyss. The scene of disruption, the rocks of solid sandstone cleft asunder, the innumerable fractures made on the surface, the falling in of the strata, the half-consumed prostrate trunks of trees, and others only awaiting the slip of the rock beneath them to fall in their turn, the pernicious vapours arising around, amidst the roaring of the internal fires, and the white and red heat of the burning crevices, present an appearance on which the beholder cannot fail to gaze with wonder, and, at the same time, to lament his inability to account with any degree of certainty for the first natural cause of the spectacle before him.

“At a little distance from the burning portions of Wingen, I picked up several amorphous specimens of cornelian, white, pinkish and blue; angular fragments of ribbon and fortification agates, and balls of agate, some of them filled with crystals, varying from the size of a pea to that of a hen's egg, and others of a blueish-white and clouded colour, having spots of white dispersed throughout them, which, if cut and polished, would present a very beautiful variety of this mineral. Mount Agate, also in the neighbourhood of Wingen, presented me with some fine specimens as well of agate (fortification and ribbon occurring in the same specimen,) as fragments of white and blueish cornelian; and had not the grass upon the mountain been so long and thick as it proved to be, I should, doubtless, have collected much finer.

“Several of the agates collected from Mount Wingen, upon examination, were found to have their surfaces crusted over with iron; some of those from Mount Agate with native copper; while others, from the same locality, presented a most beautiful auriferous appearance. On Mount Wingen we found, within but a few yards of that portion of it which is now under combustion, the cast of a bivalvular fossil shell in sandstone, a species of *terebratula*; other similar specimens have been met with on another part of the mountain. Only two specimens

of organic remains, of the nature of petrified bone, have hitherto been discovered in the neighbourhood of Mount Agate; viz. the sacrum of some large animal, on the Holdsworthys downs, and the second cervical vertebra of another, about ten miles west from Merton; but, in neither instance was the petrification imbedded in the subjacent strata, but merely lying on the surface of the soil; and, therefore, most probably, contemporary with the petrified wood, which is found scattered very abundantly over this tract of country. Near the chain of the Kingdon Ponds, forming one of the sources of the Hunter, and rising in the dividing range a few miles N. by W. from Mount Wingen, are stumps of trees standing upright in the ground, apparently petrified on the spot where they formerly grew. In some places the wood is strongly impregnated with iron. About three miles along the coast south of Newcastle, in an upright position, at high-water mark, under the cliff, and beneath a bed of coal, was also lately found the butt of a petrified tree, which, on being broken, presented a fine black appearance, as passing into the state of jet; and on the top of the cliff at Newcastle on which the telegraph stands, imbedded at about a foot beneath the surface, lying in a horizontal position, and nearly at right angles to the strata of the cliff, the trunk of another, finely grained and white—both specimens being traversed by thin veins of chalcedony. The coal which is exposed to view on the face of the cliffs, is of the independent formation, and appears to run generally in three parallel horizontal beds; but in some places with a varying dip. It alternates, in one part of the cliff, with slaty clay, sandstone, and shale, with impressions of leaves; at another, with mill-stone grit and a hard cherty rock. Nodules of clay ironstone, and trunks and stems of arundinaceous plants in ironstone, are seen in abundance on the alternating strata of the cliff; and in one place a narrow bed of ironstone, bearing impressions of leaves, is remarkable; while thin laminæ of the same mineral, the surface of which is traversed by square and variously-shaped sections, are seen on several parts of the shore, both in the face of the cliff parallel with the beds of coal, and extending into the sea, forming the strand at low water.”

The following table (derived from Count Strzelecki's valuable work), shows the altitudes, in English feet, above the level of the sea, of the most remarkable mountains,

lakes, watercourses, plains, and stations in New South Wales and Port Phillip or Victoria, as determined by the barometer; those included in Port Phillip being given

here with the idea of affording a more just view of the relative elevation of the most remarkable positions in each province:—

Name of Heights.	Feet.	Name of Heights.	Feet.
Peel Plains, New England	1,800	Guantewang, north-east of Wellington Vale . . .	1,410
Mount Mitchell	4,120	Camden, estate of James M'Arthur, Esq.	248
Mount Lindesay	5,700	Mount Prudhoe, summit above the road	1,006
Mount Sturt	3,735	Stone Quarry Creek, below the bridge	482
River Condamine, 28° 10' S. lat., 151° 40' E. long. .	1,402	Crisp's Inn, Myrtle Creek, Camden County	783
Rocky Creek	1,717	Bed of Myrtle Creek	643
Brushy Valley, 28° 20' S. lat., 151° 20' E. long. .	1,504	Bargo River, Ford	771
Apple Tree Flat	1,091	Lapton's Inn	1,206
Dumaresq River, 28° 55' S. lat., 150° 40' E. long. .	840	Little Forest Hill	1,923
Glen River, 29° S. lat., 151° 35' E. long.	1,049	Cutter's Inn, Camden County	1,967
Gwydir River, 29° 35' S. lat., 150° 25' E. long. .	895	Mittagong Range [summit]	2,454
Mount Hundawar, or Harkwick, 30° 15' S. lat., 150° 25' E. long.	2,545	Cordeaux Farm	2,222
Barrow Valley, 30° 40' S. lat., 150° 20' E. long. .	808	Cockatoo Hill	2,356
Wallambora Ford, 30° 40' S. lat., 150° 25' E. long. .	1,016	Berrima Inn	2,096
Mount Bathurst, 31° 5' S. lat., 151° 50' E. long. .	4,000	Bed of Wingecarrabee River	2,058
Glen Apsley River, 31° 5' S. lat., 152° E. long. . .	1,000	Bed of Black Bob's Creek, under the bridge . . .	2,051
Bathurst Cataract, New England	235	The Kentish Arms Inn, three miles beyond Mid- way Rivulet	2,028
Beckett's Cataract	150	Bed of Midway Rivulet, Camden County	2,003
Mount Sea View	6,000	Summit of Stony Hill	2,400
Macquarie Cataract, 31° 55' S. lat., 148° 10' E. long.	680	Wombat Brush, terrace above Paddy's River . . .	2,128
Summit of Lapstone Hill, Cook County	747	Ford of Paddy's River, Camden County	1,856
Springwood, depot, Cook County	1,147	Arthursleigh, estate of H. M'Arthur, Esq., Argyle Co.	1,977
Station on the Mount Road, Blue Mountains . . .	1,707	Norwood, Argyle County	2,116
Caley's Repulse, Cook County, Blue Mountains . .	1,868	Rossville House	2,057
Twenty-four Miles Hollow, Cook Co., Blue Mountains	2,738	Breadalbane Plains	2,278
King's Table Land, Cook County, Blue Mountains .	2,790	Summit of Hill, south of Wallagoray	2,606
Stone Quarry, one mile beyond King's Table . . .	2,882	Tarrago Ponds, Argyle County	2,264
Weather Board Hut	2,844	Gidleigh, estate of Captain P. P. King	2,358
Mount Hay	2,425	Sugar Loaf, or Squall Hill, near Gidleigh	3,288
Mount Tomah	3,240	Big Creek, near the Gap through the Black Range	2,979
Foot of Mount Victoria, Flagan's House	2,607	Head of Big Creek and Stony Creek	3,136
Mount George	3,620	Summit of Prospect Hill	3,275
Bridge over Butler's Rivulet, Vale of Clywd . . .	2,188	Last Hill	3,176
Mount York, Vale of Clywd, Blue Mountains . . .	3,440	Wollondilly River, below Rosseville	1,971
Foot of Mount York, Collet's Farm	2,180	" at the Junction of Paddy's River	1,840
Mount Adine	3,736	" at the Ford of Arthursleigh	1,830
Ford at Cox's River, Vale of Clywd	2,052	" at Detley Crossing Place	1,752
Fish River, on the road to Bathurst	3,220	Yass River Rivulet	1,311
Military Station, Blue Mountains	3,010	Nackie Nackie Hill	2,242
Badger Brush Ridge	3,290	Mount Kosciuszko, Australian Alps	6,500
Police Station, Dividing Range Bathurst	2,910	Mount Dargal	5,490
Cox's River, before reaching Blaxland's	2,266	Mount Pinnabar	4,100
Mount Blaxland [the highest summit]	3,256	Cowrang Creek	1,350
Jock's Bridge	2,921	Dividing Range in the Omeo County	3,800
Hill beyond Jock's Bridge	3,496	Source of the Mitta-Mitta River	1,850
Bathurst Town	2,310	Lake Omeo	3,100
Summer Hill, Frederick Valley	3,010	Second branch of Mitta-Mitta River	1,900
Boree Plains	1,560	The average height of the flats in Gipps' Land . .	210
Mount Canoblas, Wellington County	4,610	Range between Gipps' Land and Port Western . .	2,510
Macquarie River, at Wellington	1,439	Mount Wilson, Wilson's Promontory	2,350
Captain Ryan's, Boree Station	1,992	Dutson, a sheep station of P. King, Esq., lat. 35° 27', long. 147° 53'	1,844
Molongorang (Mr. Passmore's)	2,062	Ellerslie, sheep station	1,266
Heregal (Mr. Maxwell's Station)	1,616		

RIVERS, CREEKS, AND HARBOURS.—The rivers of Australia, not even excepting the Murray, bear a very much smaller proportion to the size of that continent, and occupy a far less prominent geographical position than do those of any other country of similar extent, and they afford very limited communication between the coast and the interior. Of them, therefore, and for somewhat similar reasons of the creeks, lakes, and lagoons of New South Wales, a brief notice may suffice, especially as many of them have been already alluded to in the section on inland exploration; but this notice it may be well to preface

with the warning given by captain Sturt to those of his readers not conversant with the peculiarities of Australian watercourses. "A creek," he says, "is not always an arm of the sea. The same term is used to designate a watercourse, whether large or small, in which the winter torrents may or may not have left a chain of ponds. Such a watercourse could hardly be called a river, since it only flows during heavy rains, after which it entirely depends on the character of the soil through which it runs, whether any water remains in it or not." "A lagoon is a shallow lake, it generally constitutes the

back water of some river, and is speedily dried up."

The number of constantly flowing streams in New South Wales is very limited, but an all-wise Providence has in a most remarkable manner provided a remedy for this deficiency by the peculiar construction of the channels of the greater part of the rivers, which form a succession of deep reservoirs, being in fact a connected series of ponds or water-holes. This wonderful provision for the exigencies of animal existence is rendered the more striking by the character of the Australian aborigines, whose want of constructive ability manifested in so many respects, clearly indicates their incapacity of discovering a means by which the superabundance of one season might be made to supply the insufficiency of another.

The first stream of importance explored by the early settlers at Sydney Cove, and which, until the discovery of the Murray, was the broadest fresh water stream known in Australia, was named by governor Phillip the Hawkesbury. Its course, when traced inland from Broken Bay, where it disembogues, becomes extremely tortuous, the distance of Windsor (a town built upon it,) being not more than thirty-five miles from the sea in a direct line, but by the windings of the river, 140 miles; the rise of tide is about four feet, and the water fresh forty miles below Windsor, at which place it is of considerable size, and navigable for vessels of 100 tons for four miles above the town. A little higher up it is joined by a mountain stream called the Grose, which issues from a remarkable cleft in the Blue Mountains, in the vicinity of the pretty town of Richmond, about forty miles from Sydney. The Hawkesbury, while flowing along the base of these mountains, is fed by numerous tributary torrents descending from narrow gorges, which after heavy rains cause it frequently to overflow its banks as it approaches the sea; in one instance it rose, near the town of Windsor, ninety-three feet above its ordinary level.* Broken Bay extends inland to a considerable distance, and is divided into many creeks and inlets, forming excellent havens, two of which, according to Phillip, are capable of containing the whole British navy. The Hawkesbury, previous to its receiving the Grose, is called the Nepean, or rather it is a continuation of that river, which, rising in Camden country, forms the boundary for a while between that county

and Cumberland, and subsequently between the counties of Cumberland and Cook. The scenery along the Nepean is magnificent; immediately beside it the Blue Mountains rise in frowning majesty, to a perpendicular height of nearly 3,000 feet, while along the fertile borders of the stream are fields of wheat, barley, maize, bran, peas, clover, &c., to the extent of several thousand acres. The point at which I first saw the Nepean river, was at the estate of Mr. S. Terry, the wealthy emancipist previously mentioned. As far as the eye could reach, nothing could be seen but the yellow waving corn, save when the view was bounded by the gigantic buttresses of the mountain barrier. I never beheld a finer farm in Europe than Mr. Terry's; and while enjoying the cheerful scene, I could not but feel proud of belonging to a nation, who through her outcast and erring children had extracted from the stubborn soil of a distant land such admirable results. The Macdonald and the Colo are the chief tributaries of the Hawkesbury, and the Warragamba of the Nepean. The Warragamba (a continuation of the Wollondilly) receives the Cox twenty miles to the southward of Emu Plains. The Cox pursues its course through a wild region, and in parts could be traced only by scrambling on foot, or by following out the several extremities of the mountain ranges which overhang its rocky channel.

Hunter River disembogues in the sea at the harbour of Newcastle, Port Hunter, a safe haven, sufficiently capacious for vessels of 300 tons burthen; fifty-nine miles N. 22° E., from the entrance of Port Jackson. The Hunter, formerly called the Coal River, is formed by several streams flowing from the Blue Mountains, and is navigable for fifty miles from Newcastle, by small craft of thirty to forty tons burthen. Beyond this distance there are several shallows, which only admit the passage of boats over them. There are three branches to the Hunter, called the Upper, the Lower, and the Middle; the two former are navigable for boats for about 120 miles, and the latter for upwards of 200 miles, but the branches are all liable to sudden and terrific inundations, owing to the rapid descent of torrents from the Blue Mountains. In consequence of the fertility of the soil along the Hunter, and the extent of water communication which exists, this district is one of the finest in the colony. A large number of respectable farms skirt the banks of the river and the country

* Wentworth's *Statistical Account of N. S. Wales*.

wears an aspect resembling the rich pastoral scenery of Devonshire. The valley of the Wollombi extends in a northerly direction towards Hunter's River, for about thirty miles. It is bounded on either side by mountain ranges, covered with timber to their summits. Numerous valleys, or, as the settlers call them, *arms*, branch off on either side; some stretching twenty or thirty miles among the mountains, all abounding in excellent pasture, and affording sustenance to numerous flocks of sheep, and herds of cattle that depasture amidst this wild and beautiful scenery.

Port Stephens, situated about 100 miles from Jackson, is a fine harbour; the narrow entrance between rocky headlands, opens into an expanse about two miles in length; then narrowing, forms a channel, which admits vessels of considerable burthen, to a second bay perfectly land-locked. The little river Karuah, which falls into it, affords a means of communication some distance into the interior; it is said to be navigable as far as Booral, which is twenty miles from Port Stephens. The Myall, a still smaller stream, which has its embouche in Port Stephens, opens into some extensive lakes, situate along the coast, separated only by a narrow strip of land from the ocean.

Manning River forms the northern boundary of Gloucester county; it disembogues into the ocean by two mouths, called Farquhar and Harrington inlets, which are divided by a singularly-shaped island, named Mitchell Island: neither of them afford more than a harbour for boats, for which, indeed, the navigation of the Manning is alone adapted. It flows from the eastern side of Liverpool range: its banks have good soil and fine scenery.

Hastings River, after a course of about 100 miles, joins the sea at Port Macquarie, about 220 miles to the north-east of Port Jackson, in $31^{\circ} 25' 45''$ S. lat., $152^{\circ} 53' 54''$ E. long. Port Macquarie is a bar harbour, with at least nine feet low water spring tides. The bar (composed of soft sand) extends for 200 yards; beyond this, the water immediately deepens to two and three fathoms; within the port, the soundings are five and six fathoms, which depth continues for nearly ten miles, when shoals confine the navigation to crafts drawing six or eight feet. That depth continues for eight miles, where the rapids commence. The source of the Hastings has been already mentioned (p. 433), on the authority of count Strzelecki; ac-

cording to Mr. Hodgkinson, it rises (in $31^{\circ} 50'$ S. lat., $151^{\circ} 50'$ E. long.), "at Mount Warragembi, one of the summits on the range which divides the basin of the Manning River from that of the M'Leay. This range branches out at Mount Warragembi, so as to form the basin of the Hastings River, which consequently does not rise in the great main chain of mountains dividing the eastern and western waters, as some authors have averred." Mr. Hodgkinson, in the interesting work from which the above observation is taken—*Australia, from Port Macquarie to Moreton Bay*—notices an error with regard to the Hastings river, made by me in a previous work, for which I cannot, at this lapse of time, at all account. He makes due and kindly allowance for errors "almost unavoidable in writing a work of such magnitude as Mr. Montgomery Martin's *History of all the British Colonies*;" but he is, perhaps, scarcely aware of the difficulty which existed at the period at which it was written (1834–5), of obtaining accurate and sufficient data concerning many of our vast possessions, and especially Australia.

The country bordering on the Hastings undulates pleasingly in hills and dales lightly clothed with good timber; to the north-east the river opens into reaches of great width and beauty. The Maria river, which empties itself into the Hastings at John's Plains, is navigable, according to Dr. Lang, for "forty miles from its mouth;" but he must mean only for small craft. The Wilson river, another tributary of the Hastings, is navigable for about twenty miles; the alluvial soil on its banks is of excellent quality, as evinced in the produce of a series of farms extending for twelve or fifteen miles in a continuous chain. A few miles to the south-east of Port Macquarie are some extensive lakes, which communicate with the ocean.

The MacLeay River falls into the sea at Trial Bay, in $34^{\circ} 40'$ S. lat. Trial Bay is a good roadstead, being completely protected from all winds but those between north and east, from which quarters the winds are seldom strong. The entrance to the river is obstructed by a bar having about eleven feet of water on it; it is described by captain King as being navigable for vessels of 300 tons to fifty-seven miles above its mouth: but Mr. Hodgkinson, when recently surveying it, found it only navigable for thirty-four miles, and so far only for vessels not exceeding sixty or seventy tons burden. The Apsley joins the MacLeay from the south-

west; above this junction the scenery is described* as assuming a grand alpine character, both rivers hurrying along rapidly descending beds, through narrow glens of frowning precipices, 3,000 feet in height, whilst the surrounding mountains frequently attain an elevation of 6,000 feet above the level of the sea. Tremendous cataracts are of continual occurrence; at one of them the whole river has a perpendicular fall of 250 feet, and after raging in a furious torrent, half foam and vapour, along a steep inclined plane, it again dashes down another perpendicular fall of 100 feet; the total descent of its waters in this short distance being probably little under 500 feet. After tracing the MacLeay upwards, through this rugged country, its bed rising rapidly to a very considerable elevation above the sea, we at length emerge on a gently rising table land. From this point to its sources, the MacLeay river changes its character, and assumes similar features to the New England streams, flowing west to join the Peel river, smaller trees sparingly scattered over pasturage of quite different aspect to that bordering the lower MacLeay, being here observable.

The Nambucca River, whose mouth is about eleven miles to the north of the MacLeay, has its entrance obstructed by a rocky impassable bar; it is formed by several mountain streams rising in bushy gullies, and its banks consist of mangroves, tea-tree swamps, dense forest and cedar brushes. "The nettle-tree," (says Mr. Hodgkinson,) "attains a very large size at the MacLeay and Nambucca rivers, being often six feet in diameter, and of a corresponding height; its wood is very soft and spongy, and its leaves, which are of great size, resemble in shape those of the mulberry, and, at the same time, possess the bright green velvet appearance of the geranium leaf. The slightest touch of one of these leaves occasions a most acute stinging pain; but horses suffer infinitely worse than men, from contact with the leaves of the nettle-tree, as their skin rises in large blisters, and great temporary constitutional derangement seems to take place."

The Coohalli, a small stream which filters through a sandbank to the sea, about six miles north of the embouchure of the Nambucca, is deserving of mention, from its being noted by Mr. Hodgkinson as the furthest point south, and, consequently, the

nearest point to Sydney, at which he found the magnificent variety of pine generally known as the "Moreton Bay pine." "These trees," he says, "occur here all of a sudden, in considerable numbers, and of great size and altitude, although I have not detected one single individual pine in any of the brushes of the Nambucca, MacLeay, Hastings, or Manning rivers, or, indeed, anywhere south of this point."

Bellengen River was discovered by a party of sawyers, in 1841. It is a fresh-water stream, about the size of the Hastings; but, notwithstanding the luxuriant vegetation on its banks, is rendered unavailable for grazing purposes by the precipitous heights which hem in and contract its bed. The sawyers, however, must have considered their discovery a very fortunate one, for Mr. Hodgkinson, who explored it in 1842, speaks very highly of the quality of the timber growing on its banks, and those of its tributary, the Odalberree, the trunks of the cedar and rosewood trees being often six feet in diameter and ninety feet high, before they throw out a single branch.

Clarence River disembogues in Shoal Bay, in $29^{\circ} 30'$, where its entrance is obstructed by a bar having about eleven feet of water on it. The Clarence is remarkable for its great breadth and large volume of water (compared with other rivers of Australia), and considering the shortness of its course. Its reaches are said to be longer and wider than those of any stream on the coast of Australia, and navigable for large steamers to a considerable distance up the river; the Clarence being navigable, for some craft, for nearly ninety miles. A few miles above its mouth is an island, containing an area of above 1,500 acres, and many smaller ones occur higher up the river. The country on its banks available for grazing purposes being of considerable extent and excellent quality, a great number of squatters have formed stations upon it. The Clarence rises in the dividing range, and receives several large tributaries, one of which, the Ora-Ora, rises in the lofty mountains which divide the basin of the Clarence from the Bellegen.

Richmond River (still tracing the coast in a northerly direction,) falls into the sea near Lennox Head, in $28^{\circ} 55'$ S. lat. The bar at its mouth has from eight to ten feet of water upon it, above which the river is navigable for small craft for about thirty miles. Its sources are not yet ascertained,

* Hodgkinson's *Australia from Port Macquarie to Moreton Bay*.

but its main stream appears to rise in the dividing range, near Wilson's Peak and Coke's Head. There is much good available land on its banks, and some fine cedar.

Tweed River, or, rather, *creek*, for it is but a large salt-water inlet, yet its extensive reaches are navigable for large boats to a distance of upwards of forty miles from its bar, which has been crossed by a schooner of sixty tons burden.

Brisbane River.—Proceeding along the coast, we arrive at Moreton Bay, which is sheltered by two narrow islands of from fifteen to twenty miles in length, called Moreton, and Stradbroke Island. The bay is said to be sixty miles in extent; it receives several streams, the most important of which are the Logan, the Brisbane, and the Pumicestone river. The Brisbane disembogues in $27^{\circ} 1' \text{ S. lat.}, 153^{\circ} 26' \text{ E. long.}$ The bar at its mouth has eighteen feet of water on it. This river was discovered, in 1823, by captain Oxley, who, in his official despatch, makes the following remarks concerning it:—

“When examining Moreton Bay, we had the satisfaction to find the tide sweeping up a considerable inlet, between the first mangrove island and the main land. The muddiness and taste of the water, together with the abundance of fresh-water mollusca, assured us we were entering a large river; and a few hours ended our anxiety on this point by the water becoming perfectly fresh, while no diminution had taken place in the size of the river after passing what I called Sea Reach. At sunset we had proceeded about twenty miles up the river. The scenery was peculiarly beautiful; the country along the banks alternately hilly and level, but not flooded; the soil of the finest description of brushwood land, on which grew timber of great magnitude, and of various species, some of which were quite unknown to us. Among others, a magnificent species of pine was in great abundance. The timber on the hills was also good; and to the south-east, a little distance from the river, were several large brushes or forests of the *cupressus Australis*, of very large size. Up to this point the river was navigable for vessels not drawing more than sixteen feet water. The tide rose about five feet, being the same as at the entrance. We proceeded about thirty miles further, no diminution having taken place either in the breadth or depth of the river, excepting in one place for the extent of thirty yards, where a ridge of detached rocks extended across the river, not having more than twelve feet upon them at high water. From this point to Termination Hill the river continued of nearly uniform size. The tide ascends daily fifty miles from the mouth of the Brisbane, flowing also up the Bremer, the depth of whose channel it augments by eight or more feet. The country on either side is of very superior description, and equally well adapted for cultivation or grazing, the timber being abundant, and fit for all the purposes of domestic use or exportation. The pine trees, should they prove of good quality, are of a scantling sufficient for

the largest ships: some measured upwards of thirty inches in diameter, and from fifty to eighty feet without a branch.”

Subsequent examination has verified, to the fullest degree, this favourable account; and the capabilities of the valuable and beautiful tract of country, traversed by the Brisbane and its tributaries, even surpass his expectations in their capacity of supporting a numerous population, and of producing, in abundance, the tropical products of sugar, cotton, coffee, silk, tobacco, &c. In a subsequent part of his despatch, captain Oxley thus expresses himself concerning the source of the new-found stream:—“A consideration of all the circumstances connected with the appearance of the river, justifies me in entertaining a strong belief that the sources of this river will not be found in a mountainous country. Most probably it issues from some large collection of interior waters, the reservoir of those streams crossed by me during an expedition of discovery in 1818,” (see p. 383), “and which had a northerly course. Whatever may be its origin, it is by far the largest fresh-water river on the east coast of New South Wales.” Captain Oxley's surmise concerning the sources of the Brisbane, and the length of its course, have been disproved by more recent surveys, the Brisbane having been ascertained to take its rise in the dividing range, opposite to and in a straight line only sixty miles from Moreton Bay. The width of its basin, its tortuous course, and numerous tributaries, however, soon render it an important stream. It is joined on the south side by the Bremer river rising near Mount Frazer, on whose banks coal and limestone are found in large quantities.

Wide Bay is a good port, having in its entrance a channel of not less than three fathoms deep: it communicates with Hervey Bay, thus completing the insulation of Great Sandy, or Frazer's Island, whose north-eastern extremity was named by captain Cook, Sandy Cape. Mr. R. S. Russell, who visited the bay in 1842, thus describes it:—“Frazer's Island, which forms Wide Bay, or, more properly speaking, ‘Sound,’ for it is twenty-five miles long, runs nearly parallel to the main, trending more easterly towards the northern extremity, thereby leaving a wide open entrance. At the southern extremity the island is not more than three-quarters of a mile from the main. A spit of sand comes out both from the island and from the main; but by not attempting to

run in until the round mountain, called Boppol, is well open between the two shores, the channel is clear and good with at least six fathoms water." Mr. Russell, in his account of this excursion, subsequently states that he found in the southerly part of the bay, to which his exploration was confined, innumerable shoals and islets; one large navigable river, called by the natives Monobocola, without a bar, but having at its mouth sand-banks dry at low water, which leave only a narrow channel between them. The tide flows about thirty miles up, and the river is navigable for that distance for vessels drawing eight feet; after losing the tide it soon becomes small, but can be ascended by boats for about twenty miles further. The banks are low, but generally well timbered with large trees, and ducks and black swans abound. To the country near the head of the boat navigation of this stream the natives resort in large numbers, to feed on the fruit of the Bunya-Bunya tree, a species of pine, growing, according to Mr. Russell, as straight as an arrow to the height of from 100 to 300 feet. It bears a large cone full of nuts, which are excellent when roasted, but taste, when raw, like the horse-chestnut.*

Hervey Bay is fifty miles wide, at its mouth, and extends inland, in a southerly direction, for about the same distance.

Bustard Bay, in $24^{\circ} 4' S.$ lat. and $208^{\circ} 18' E.$ long., was so named by captain Cook, in honour of a bird of the bustard species, about the size of a turkey, caught here, which he speaks of as the best bird he had eaten since he left England.

Boyne River, or rather, the upper portion of that stream, was discovered by Mr. R. S. Russell, in his second exploring expedition of 1842, but only partially explored. The

bed of the river, near its source, lies in a valley of the dividing range, apparently elevated about 1,500 feet above the level of the sea, receiving small tributaries from the higher country, both east and west. The bed here was sandy, with much of the tea-tree growing in and about it; high reeds grew also along the edges of the reaches which, thirty or forty miles farther (tracing the river *from* its source), increase greatly in length, while many streams, both from the east and west, empty themselves into the main channel, the land becoming more mountainous, and the valleys more fertile; a considerable tributary, called the Stuart, flows in from the eastward. The Boyne, though after the confluence of the Stuart it contains a volume of water very unusual in Australian streams, cannot, it is feared, be used for internal communication, as it flows, in many parts, rapidly over rocky beds. The river was traced by its discoverers for about 300 miles, or to about $24^{\circ} 15' S.$ lat.; when they turned back, it was flowing considerably to the eastward of north, and they were, apparently, not far from the sea.

Port Curtis, into which a river called the Boyne, and considered by Mr. Russell identical with that above described, disembogues, is in $23^{\circ} 51' 45'' S.$ lat., and $151^{\circ} 24' E.$ long. (ten degrees east of Sydney); it is reported to be an excellent harbour, which, through the passage of entrance recently discovered by captain Stanley, is of very easy access for shipping of any burthen. The coast line from this point has been described in a previous section; we therefore return to Broken Bay, premising, however, that the rivers of New South Wales, south of Sydney, are generally inferior to

* Among a native tribe on this river, Mr. Russell found a white man, a convict named Davis, who had absconded from the penal settlement fourteen years before, and had never since been heard of. He had been transported when only eleven years of age, and had run away two years after; he appeared at first to have almost entirely forgotten his own language, but soon recovering his knowledge of it, he was persuaded to return to Moreton Bay. The natives shewed great sorrow at parting from him, and followed him a long way down the banks of the river with loud lamentations. The statement made by Davis concerning the aborigines was to the following effect:—That they supposed all their own men who had died or been killed in battle to become white men, because, before eating them (for they are cannibals) they draw the skin off, and wash the flesh before cutting it up. When flayed in this way the flesh of a black man is perfectly white. They believe he becomes a white ghost in another country beyond the sea. Accord-

ingly, when they first heard of whites, they supposed them to be the ghosts of their own dead come back; and if any one traced a fancied resemblance in a white man to a deceased relation or friend, he took him under his protection, in the full persuasion that it was his son, brother, or whoever it might be, returned to him. In such a case a white man has nothing to fear from the tribe to which his patron belongs. They will kill a fat white man sometimes, to eat, if he is not owned by any of the tribe as some ghost of a returned relation, but they will not skin him as they suppose him to have been already skinned when eaten as a black. In cutting a man up they open his back, and having extracted the bones from the legs and arms, these are eaten by the men as being the tit bits. They then cut the head open and pick it; the viscera and heart are given to their gins (wives), whom they use worse than dogs.—See *Journal of Royal Geographical Society*, vol. xv.

those on the north, in both length of course and volume of water; and, therefore, few of them need any especial notice, their names and situations being sufficiently delineated on the map.

Paramatta River is little more than an extension of Port Jackson, but very useful as affording the means of water communication between Sydney and Paramatta, being navigable for that distance (eighteen miles) by second-class steam-boats and small craft. Port Jackson has been already mentioned, and also Botany Bay; the north point of entrance to the latter is formed by Cape Banks, and the south by Cape Solander, in $34^{\circ} 0' 45''$ S. lat., $151^{\circ} 15' 50''$ E. long. A plate fixed in the rock of this latter cape, records the first visit of captain Cook.

George River disembogues in Botany Bay, after collecting chiefly all the waters to the eastward, between the Hawkesbury and the sea. Small vessels ascend the river as far as Liverpool, which, following the windings of the stream, is about twenty-four miles from Botany Bay, though, in a direct line, only half that distance; the water near Liverpool is stated by Mr. Wentworth to be occasionally brackish, during the long summer droughts.

Port Hacking, as far as I am aware, has not been specially surveyed; we gather from Flinders' brief account, that it has three-and-a-half fathoms in the entrance; that it divides into three branches, and carries from three to five fathoms water in the middle one, at the distance of two miles from the sea.

Red Point, further to the southward, in $34^{\circ} 29'$ S. lat., is a remarkable headland situated on the north-east side of the peninsula which incloses Lake Illawarra on the north. It acquired its name from the dull red colour of its cliffs; on it are four hillocks, which present the form of a double side-saddle; it may also be recognised by a strangely shaped hill, about eight miles from it, named Hat hill, by captain Cook. There are two rocky islands off the point, and at a short distance to the northward, another group, called Martin's Isles. Illawarra lake is a large salt-water lake communicating with the sea.

Point Bass is the next marked feature on the coast, to the south of which *Shoalhaven River* falls into the sea, between the counties of Camden and St. Vincent. This stream is navigable for about twenty miles, for vessels of seventy or eighty tons burthen.* Its

* Wentworth's *New South Wales*.

channel is a ravine, about 1,500 feet below the ordinary level of the country between it and the Wollondilly. A singular grandeur is imparted to the scenery of the Shoalhaven, by precipices, consisting, at one part, of limestone of a dark grey colour, and containing very imperfect fragments of shells—and at another, of granite.

Among the peculiar features of these lofty river banks are many remarkable hollows, called "hoppers," by the country people, from the water sinking into them, as grain subsides in the hopper of a mill. The country on the upper part of the Shoalhaven river comprises much good land; the river flows there nearly on a level with the surface, and resembles an English stream; the temperature, at the elevation of about 2,000 feet above the sea, being also so low, in summer, that potatoes and gooseberries, for both of which the climate of Sydney is too hot, grow there luxuriantly.†

About two miles from the mouth of this river is a small port, called by the same name (Shoalhaven), which it well merits, the entrance being choked with sand, and the interior with banks of mud, leaving, however, a sufficient channel for boats.

Jervis Bay extends about three leagues from north to south, and nearly two in breadth. Its east side is sheltered by a peninsula, the bight behind which (named Crookhaven) is separated from the bay by an isthmus of not more than 400 yards wide. The north point of the entrance to Hervey Bay, called Point Perpendicular, is (according to lieutenant Jeffreys) in $35^{\circ} 6' 28''$ S. lat.; the south point is formed by a small low island lying contiguous to Cape George, between which there is a passage, though a very bad one. The entrance is about a mile-and-a-half, or two miles wide, with a depth of fifteen to twenty fathoms, and, within, the soundings are regular, from fourteen to ten fathoms, decreasing to eight and seven fathoms near the shore on either side. There is sufficient room for ships of any size to work in or out; but there are dangers difficult to guard against. A sunken rock lies about one and one-third mile within the north point of the entrance, and a mile distant from the shore; and (judging from the plan of Mr. Weatherall, published by the Hydrographical Office, Admiralty,) reefs seem to extend from almost all the points in the bay. The best and most con-

† Mitchell's *Expeditions into Australia*.

venient anchorage is from six to ten fathoms, under Bowen's Island.

Cape George, in $35^{\circ} 10'$ S. lat., lies to the southward of Jervis Bay; the next inlet is Sussex Haven, by which a lake with broken shores, called St. George's Basin, communicates with the sea. Still proceeding south, the next land-marks are the Pigeon-house, a peaked hill so called by captain Cook, from its resembling a square dove-house with a dome at the top, in $35^{\circ} 20' 30''$ S. lat., and the perpendicular cliffs of Point Upright, in $30^{\circ} 35'$ S. lat.

Clyde River, which is described as a fine, clear, and capacious river, with nine feet water on the bar, and deepening within to six fathoms, empties itself into *Bateman's Bay*. Lieutenant Johnson carried a depth of seven to four fathoms upwards of twenty miles within the bay. The bay is about six miles wide, and contains several little islands, behind which small vessels frequently take anchor.

Moruya River falls into the sea at *Moruya* or *Broulé Bay*, to the south-east of which is Cape Dromedary, a projecting headland, with a double mountain over it of considerable elevation, which, it is said, may be seen at the distance of twenty leagues. The Cape is in $36^{\circ} 18'$ S. lat., and about six miles to the eastward of it lies Montague Island, of nearly two miles in length from north to south, with a depth of twelve fathoms near its west side, where ships may anchor, but on a rocky bottom. There are some rocks near the south-west end of the island. All the coast between this promontory and Cape Howe may be safely approached, to a reasonable distance, as soundings extend to the distance of three or four leagues.

Barmouth Harbour is thus mentioned by captain Flinders:—"A strong wind, which burst from the south, obliged Mr. Bass (in a whale boat), to run for a gap in the land, which had just before been noticed. Here, on a little beach, at the mouth of an inlet, across which the sea was breaking, the boat was hauled up for the night. Next morning, the inlet being free from breakers, he entered the prettiest little model of a harbour he had ever seen. Unfortunately, it is but a model; for although the shelter within be complete for small craft, yet the depth over the bar is too small even for boats, except at high water, when there is eight or nine feet." The intermediate land between Barmouth Harbour and Twofold Bay, a

distance of about seven leagues, is of moderate elevation, bending a little to the eastward, with three islands contiguous to it.

"*Twofold Bay*," says captain Flinders, "is not of itself worthy of any particular interest, but as nothing larger than boats can find shelter in any other part of this coast, from Corner Inlet, or from Furnaux's Isles to Jervis Bay, it thereby becomes important to whalers and other ships passing along this coast." The shores of the bay are of moderate elevation, and consist of steep heads, rocky points, and sandy beaches. Snug Cove is situated in the north-west angle of the bay in $37^{\circ} 4'$ S. lat., $150^{\circ} 3'$ E. long. "Wood, in abundance," says Flinders, "can be procured on every side of the bay; but there are only two places where fresh water was found, and that not very good. One of these was a swampy pond upon the low neck near Snug Cove, where casks might be filled without much difficulty; the other is near the inferior anchorage on the south side of the bay." To the south-west of Twofold Bay lies *Green Cape*, which is smooth and sloping, with a deep bight or bay to the southward; the coast from thence to Cape Howe is bold and mostly rocky.

Cape Howe, the south-east point of Australia, and the southern limit of the coastline of New South Wales, is a low point of rocks and sand, with a small island close to it. It may be easily recognized by the trending of the coast, which is nearly west on one side and north on the other, and also by some round hills in the vicinity.

The westerly or inland rivers of New South Wales, occupied a considerable portion of the section on internal exploration. We have already seen that after the successful enterprise of Messrs. Blaxland, Wentworth, and Lawson had found a pass over the Blue Mountains, several streams were discovered flowing in a westerly direction, of which two of the most considerable, the Lachlan and Macquarie, were traced in their different courses, by captain Oxley, to their apparent termination in reedy and impassable morasses (page 382,) in which, however, they are not finally lost, it having been subsequently ascertained that the waters of the marshes in which the Lachlan is for a time lost, reunite in one channel and flow into the Murrumbidgee, while those of the Macquarie are drained in a similar manner into the Darling. *Lachlan River* has its origin in the mountains bordering Argyle county, one of its most easterly sources being Derin-

gullen ponds, which arise in the southern of the three open flats of grassy land called Bredalbane Plains; thence it runs in a north-westerly direction, receiving in $33^{\circ} 5' 20''$ S. lat., $147^{\circ} 13' 10''$ E. long., a tributary from the north-east, called Goobang Creek, which has its sources in the ravines between Harvey's and Croker's ranges.* The Lachlan, after the junction of the Goobang, changes its direction from north-west to south-west, and a creek called by the natives "Cudjallagong" leaves the river and conveys its waters almost straight back from their course to supply Regent's Lake, which, when discovered by Oxley, in 1817, was described by him as a "noble lake;" but when visited by Mitchell, in 1836, appeared for the most part a plain covered with luxuriant grass, with some water lodged on the most eastern part, but in no place more than a foot deep. Innumerable ducks had taken refuge there, and also a great number of black swans and pelicans, all standing high upon their legs, above the shallow water. Unlike the water of Lake George, which is brackish, that of Regent's Lake was perfectly sweet even in its shallow state. It abounds with large fresh-water mussel; on its northern margin, and a good way within the line of the water, stood dead trees of a full-grown size, apparently killed by too much water, too plainly shewing, like the trees similarly situated in Lake George and Lake Bathurst, to what long periods the extremes of drought and moisture may extend in this singular country. That the lake is sometimes a splendid sheet of water was obvious enough in the line of beach along the shores. At two different places the banks are so low that in high floods the water must flow over from the lake, and probably thus supplies Campbell's Lake, and another to the northward of Regent's Lake, named "Goorongully." Following the course of the Lachlan from Cudjallagong creek, we arrive at the farthest spot to which Oxley traced it, (according to Mitchell in $33^{\circ} 41' 10''$ S. lat., $145^{\circ} 9'$ E. long.;) but instead of terminating there, its banks at fifty miles below this spot are backed on both sides by rising ground until it turns finally southward towards the Murrumbidgee, which it joins in $34^{\circ} 25'$ S. lat., and $144^{\circ} 3'$ E. long. Sir Thomas Mitchell makes the following observations on the oc-

casion of his exploring this river in 1836:—"I beheld in the Lachlan all the features of the Darling, but on a somewhat smaller scale. The same sort of large gum trees, steep, soft, muddy banks; a margin and an outer bank. But its waters were gone, with the exception of a few small ponds, which still remained in the deepest parts of its bed. Such was now the state of that river down which my predecessor's boats had floated. I had, during the last winter, drawn my whale-boats 1,600 miles over land, without finding a river where I could use them; whereas Mr. Oxley had twice retired by nearly the same routes, and in the same season of the year, from supposed inland seas!" The Lachlan, therefore, although occasionally in flood, cannot be depended upon as a navigable river.

Murrumbidgee River rises in the western ridge of mountains situated to the southward of the parallel of 35° , and under the meridian of 149° , at a distance of about eighty miles from the sea, and after receiving Yass river, the Coodrabidgee, the Tumut, or Doomot, and some other minor streams, which fall into it at an early stage of its progress, pursues a long and tortuous course for upwards of 300 statute miles, without deriving the slightest increase from the country it waters. As its course extends to the westward of the meridian 147° , the river falls on a low level; the hills of sandstone rock, which give a picturesque appearance to the lands on its banks, higher up the stream, disappear, and flats of alluvial deposit occupy their place. From the account of Sturt in 1829-30, and of Mitchell in 1836, we gather that the Murrumbidgee is, to a certain extent, for a very considerable distance, a navigable river. The former authority, speaking of it at the end of the year 1829, describes it, not far from the junction of the Tumut, as "a stream whose current it would have been difficult to breast, and whose waters, foaming among rocks or circling in eddies, gave early promise of a reckless course. It must have been somewhat below its ordinary level, and averaged a breadth of about eighty feet." Lower down it "expanded into a fretful rapid, but it was sufficiently shallow to admit of taking the drays over, without the trouble of unloading them." Still lower, it increased in

* It is rather remarkable that captain Oxley, when exploring the Lachlan, should have omitted to survey that portion of it where it is joined by the Goobang; especially as, according to Sir F. L. Mitchell, it is

the floods of this stream which inundate the country below Mount Cunningham, and were the sole cause of the swampy appearance which captain Oxley observed to the westward

size, but preserved the characteristics of a mountain stream, having alternate rapids and deep pools, being in many places encumbered with fallen timber, and generally running over a shingly bed. "Below Pontebadgery it expands. Further on, it had been swollen considerably by rains, and rolled along at the rate of three miles an hour, preserving a medium width of 150 feet." Captain Sturt subsequently says—"During the night it fell considerably, but it still poured along a vast body of water, possessing a strong current. It kept a very uniform breadth of from 150 to 170 feet, and a depth of from four to twenty feet. Its channel, though occasionally much encumbered with fallen timber, was large enough to contain twice the volume of water then in it." The current was so strong, as to carry the "swimmers" out of their straight course. In January, 1830, captain Sturt embarked in his boats, about fifteen miles above the junction with the Lachlan. He proceeded from twenty-eight to thirty miles by the river's windings, but a little beyond this, one of the boats struck on a log, and went down in twelve feet water. Larger boats could have navigated the stream, which was deep and strong. The channel, however, contracted lower down, and became filled with immense trees, swept there by floods. The whale-boat again struck on a log; and, not long after, upon a line of sunken rocks of ironstone. In longitude 143° , a running stream, *the first for 340 miles*, joined the river, which, shortly after, had a breadth of 200 feet, with an average depth of from twelve to twenty feet; but several rapids occurred, down which the boats were hurried with great velocity. The channel, after this, contracted, and became blocked up with large trees, which, with an increasing current, rendered the navigation perplexing and dangerous. The trees were so numerous, that the passage could hardly be effected. The voyagers were carried, at a fearful rate, amongst these trees by a tortuous current, till they were hurried into a broad and noble river—this was the Murray. The breadth of the Murrumbidgee, at the junction of the two streams, is only fifty feet.

Sir Thomas Mitchell describes the Murrumbidgee as "an important river," and speaks of its full stream, its water-worn and lightly timbered banks, and the firm and accessible nature of its gullies, as quite the reverse of the interior rivers in general, especially the Darling; and states that above

its junction with the Murray, at Weyeba (in $34^{\circ} 21' 34''$ S. lat., $143^{\circ} 56' 27''$ E. long.,) it was fifty yards wide, with banks eleven feet high; while the noble Murray (whose description forms a portion of the topography of South Australia, its embouche being in that province) below the junction was a magnificent stream 165 feet broad, with banks twenty-five feet high. The *Sydney Herald*, in an able article, entitled, "Are the interior waters of Australia navigable?" has the following remarks concerning the two rivers we have just examined:—"The Lachlan is clearly not navigable; the Murrumbidgee, nearly up to the mountains, is; but there are considerable dangers from snags, and occasional rapids and shoals. But, perhaps, vessels purposely constructed of small draught, and carefully manned, might be employed, except in seasons of extreme drought. And if so, this river alone, offers full 400 miles of tortuous navigation, extending through at least 300 miles of direct distance." Much of the land traversed by the Murrumbidgee is of excellent quality, and adapted for the support of civilized man; its spontaneous productions long formed the chief food of its native inhabitants, and notwithstanding the great floods to which this river is subject, and the serious injury thereby inflicted on the commencing townships laid out on its banks, the locality is a favourite one, and is being rapidly occupied, especially by squatters.

Darling River, whose basin receives so large a portion of the western waters of New South Wales, is unfortunately not navigable for commercial purposes. Its tributaries, the Karaula or Dumaresq, the Nammoy, and Gwydir or Kindur, are beautiful mountain streams which rise in the hilly country behind Moreton Bay, in 27° S. lat., 152° E. long. Above the junction of the Gwydir, which is in $29^{\circ} 30' 27''$ S. lat., $148^{\circ} 13' 20''$ E. long., the Darling is a noble piece of water, and is thus mentioned by Sir T. L. Mitchell, in February, 1832:—"I now overlooked, from a bank seventy feet high, a river as wide as the Thames at Putney, on which the goodly waters, perfectly free from fallen timber, danced in full liberty; a singular-looking diving bird, carrying only its head above water, gave a novel appearance to this copious reservoir, and there was a rich alluvial flat on the opposite bank." This breadth and magnitude did not however continue; a rocky dyke traversed the river, and occasioned a slight fall, after which the Darling lost the imposing appear-

ance it had worn for a brief period, and though soon joined by the meandering Gwydir, did not resume it. The steep banks of this latter stream are lined by eucalypti (blue gum trees) of enormous size, in whose thick foliage white cockatoos abound; many dead trees encumber the channel. The average breadth of the water (in 1832) was forty-five yards; the breadth from bank to bank, seventy-five yards; the perpendicular height of these banks above the water, twenty-seven feet.

The *Nammoy* joins the Darling below the junction of the Gwydir. In its channel all the waters of the Peel, Mulnerindie, and Conadilly unite. "This stream," says Sir Thomas Mitchell, "having received the Conadilly from the left bank, had here an important appearance; the breadth of the water was 100 feet, its mean depth nearly eleven feet nine inches, and the height of the banks above the water, thirty-seven feet." The course of the Mulnerindie, from the junction of the Peel to that of the Conadilly, is somewhat to the southward of west. Below the junction of the Conadilly, the well-known native name is the *Nammoy*, which pursues a south-west course. The *Castlereagh*, known to the natives as the *Barron*, joins the Darling about fifty miles beyond the junction of the *Nammoy*; and below this, on the same side, the attenuated channel of the *Macquarie*, which was found in 1846 (a season of extreme drought) to be continuous in muddy ponds throughout the marshes, unites with that of the Darling (see p. 391).

Macquarie River is formed by the junction of the *Fish* and *Campbell rivers*, which issue from the Blue Mountains, and unite at the point of division between the counties of Bathurst, Westmoreland, and Roxburgh. The *Macquarie* takes a winding course through the plains to the north-west; in some places it is deep, broad, and navigable for large boats; in others rapid and obstructed by falls. In about $32^{\circ} 30'$ S. lat. it is still from twenty to sixty yards wide, and twenty feet deep, with a current of about a mile and-a-half an hour. The low land in which this river was lost by Oxley, has been already described (pp. 382—391). According to Mitchell, the surplus waters of the *Macquarie* are conveyed to the Darling by Duck Creek, a channel altogether to the westward of these marshes. The *River Bell* or *Molong* is one of the tributaries of the *Macquarie*, near Wellington Valley, about 170 miles west of Newcastle; another, named

the *Cudgugeeng*, is distant about fifty miles from Bathurst. Below the junction of the *Macquarie* with the Darling, and on its opposite bank, the *Culgòda* joins the latter river. The *Culgòda* is a branch of the *Balonne* (p. 392), and is chiefly characterized by the luxuriant grass on its banks, the mimosa near the bed of the current, and much sand. The *Balonne*, with which we are newly and imperfectly acquainted, is divided by the *Culgòda* into Upper and Lower. According to Sir Thomas Mitchell, the Upper *Balonne*, with majestic trees, and banks grassed to the water's edge, has some noble reaches, one of which, in $28^{\circ} 13' 34''$ S. lat., contains a large body of permanent water. Several spacious lagoons are supplied by floods in the *Balonne*. One of these, named by Mitchell, Lake Parachute, is described by him as an "immense sheet of water, with islands in it; and ducks, pelicans, &c. in abundance." In $27^{\circ} 56' 12''$ S. lat., little water was found in the bed of the river, but long islands of sand, and water-worn banks, with sloping grassy bergs behind; for the next few miles, in a north-westerly direction, the scenery was wild and grand; masses of rock, lofty trees, shining sands, and patches of water, indiscriminately mingled, afforded evidence of the powerful current that sometimes moved there and overwhelmed all. The *Condamine* is one of the principal heads of the *Balonne*. Mitchell, in relating his expedition of 1846, says, "I did not ascertain satisfactorily the point of junction of the *Condamine* with the *Balonne*, as what I saw in $148^{\circ} 55'$ E. long., $27^{\circ} 47' 57''$ S. lat., might have been only an ana-branch. The chief source of the *Condamine* is a stream which rises in the dividing range, about ten miles south of Cunningham Gap; after an irregular course, during which (we learn from the Hon. W. Wrottesley) it is joined by several tributaries—the principal one from Herries' Range—it empties itself into a lagoon having no apparent outlet, and which lies in a direct distance of about sixty miles from its head. He states that "as far as he knows the river, it is a chain of ponds and reaches, through which there is a perceptible current; the ponds are separated from each other by necks of land ranging from a few yards to miles in length, and beneath which the water forces its way. The reaches are generally deep, with high reeds fringing the edges of their banks. The waters of the *Condamine* are clear and pure to the taste; but more to the south-

ward the western rivers are often brackish. In 1841, the Messrs. Russell set out on an exploratory expedition, determined if possible to trace the reappearance of the Condamine, after losing itself in the lagoon, being persuaded that as the latter had no visible outlet for the waters it received, they must escape by some subterraneous channel, and might somewhere be found to reappear upon the surface; having therefore followed the lagoon, which is seven miles in length, to its furthest extremity, they shaped their course from thence in a direction, as nearly as they could judge, the same as the river had held before it fell into the lagoon. At the end of one day's journey they came upon a small gully, which widened until it broke into a deep, rocky river-bed, on both banks of which was a fine, open grazing country; that on the west side being undulating though not hilly, that on the east, flat and rich. "This river," says Mr. Russell, "is a very fine one for this country, its direction is first north-west and then more northerly, of course not running except in floods, but having beautiful long reaches, with deep water, and fine large lagoons branching out of it. There is plenty of the best kind of timber; iron-bark, blood-wood, pine, swamp-oak, and stringy-bark." The Narran, a branch of the Minor Balonne, (see pp. 391, 392,) terminates in a swamp. The banks of the Narran are distinguished by a belt of the *polygonum junceum*, about 400 or 500 yards wide, growing between the immediate margin and the grassy plains. Here, as on the banks of the Darling, heaps of the red-stalked coral-like plant are found. The seed therefrom is black and small, resembling fine gunpowder when shaken out, but sweet and pleasant to the taste, possessing a nutty flavour; it is collected by the natives, and made into a paste. Sir T. L. Mitchell, speaking of this river, says—

"The Narran seems a wonderful provision of nature for the supply and retention of water in a dry and parched country. The division of the main river into others already mentioned is no less so—irrigating thus from one principal channel, extensive regions of rich earth beyond the Darling, while the surplus, or overflow, instead of passing, as in common cases to the sea, is received in the deep channel of the Narran, and thereby conducted to that extensive reservoir where, on rock or stiff clay, and under ever-verdant *polygonum*, it furnishes an inexhaustible supply for the support of animal life."

This tendency to form ana-branches (*i.e.* such as after separation unite) and a network of streams, so strikingly pointed out by Sir Thomas in the present instance, and in

that of the Macquarie and the Balonne, is to a greater or less extent remarkable in the majority of the rivers of New South Wales, whose courses it is consequently very difficult to understand without constant reference to the map, so closely connected are they with one another.

Maranoa River joins the Upper Balonne; but of this stream, as also of the *Cogoon*, *Amby*, *Belyando*, and others discovered by the indefatigable Sir Thomas Mitchell, in 1846, and of the *Dawson*, *Mackenzie*, *Suttor*, *Burdekin*, *Lynd*, and others, discovered about the same time by his distinguished contemporary, Dr. Leichardt, mention has already been made in the section on internal exploration. We are so imperfectly acquainted with their courses, that it is not possible to give a clear description of them; and for general observations or fragmentary detail but little space can now be spared. From Mitchell we learn that the bed and banks of the Maranoa are of uniform extent throughout; averaging in width about 100 feet; in height of banks, from thirty to fifty feet. The course was straight; and it seemed as if a few dams might have sufficed to render it navigable, or at least to have retained a vast supply of water; for although the bed was sandy, the bottom was rocky, and the banks consisted of stiff clay. These being covered with rich grass, and consisting of good soil, water alone was wanting to make the whole valuable. The Belyando, according to the same authority, maintains a peculiar character throughout its course, with great uniformity, even after receiving tributaries apparently larger than itself. All these lapse into the same concatenated line of ponds; at one place spreading amidst brigalow scrub, at another forming one well-defined deep channel. For the formation of ponds and the retention of water, in so dry a climate, we see here something between the ordinary character of rivers, and artificial works, which man must construct when population spreads into these regions. The fallen timber of the brigalow decays very slowly, and is not liable to be burnt, like most other dead wood in open forests, because no grass grows among it. The accumulations of dead logs become clogged with river rack and the deposit of floods; to which floods these heaps present obstructions, forcing the waters into new channels, and in their progress scooping out new ponds, and completing the embankment of dead logs; which thus form natural dams

and reservoirs, to hold, under the shade of the brigalow trees, more water for a longer time than any single river-channel could retain, however sluggish its course. Thus it was that, during a season of unusual drought, abundance of water was found in this river's course, across nearly three-and-a-half degrees of latitude. From the above observations, it is evident that the Belyando is a striking example of the general construction of Australian rivers, as noted at the commencement of this section.

To return to the Darling—after receiving the Culgòla it is joined by the *Bogan*, on the opposite bank. The chief sources of the Bogan arise in Hervey's range, and also in that much less elevated country situated between the Lachlan and the Macquarie. The lower part of this river was called "Allan's Water," by Oxley; and another portion received the name of "New Year's Creek," from Mr. Hume. Since then it has been surveyed by Mitchell, nearly from its sources to its junction with the Darling; and is considered, by him, as belonging to the basin of the Macquarie, although it never joins that river, but merely skirts the plains which may be supposed to form its original bed. Throughout its whole course of 250 miles, the left bank of the Bogan is close to low hills, while the right adjoins the plains of the Macquarie, until it finally takes a remarkable turn westward towards the Darling. A striking uniformity is manifested in this little river, no change being observable throughout its whole course in the character of its banks, or the breadth of its bed, neither are the ponds near its source less numerous, or of less magnitude, than those near its junction with the principal stream. There are few or no pebbles in its bed, and no reeds grow upon the banks, which are generally sloping and of naked earth, marked with lines of flood. Mr. Dixon estimates the velocity of the current at four miles per hour, where its course is most westerly, (the average rate of the larger rivers of Australia being, according to Mitchell, two miles an hour.) It has often second banks; and, like the Darling, a belt of dwarf eucalypti, box, or rough gum, encloses the more stately flooded gum-trees, with the shining white bark, which grow on the immediate bank of the river. It has extensive plains along the banks, the soil of which is not only much firmer, but also clothed with grass, and fringed with trees and bushes of a finer variety than those

on the Darling. Yet, in the grasses there is not the wonderful variety remarkable on the banks of that river. "Of twenty-six different kinds," says Sir T. Mitchell, "gathered by me on the Darling, I found only four of the same sorts growing on the Bogan, and not more than four other varieties throughout the whole course. It appeared that where land was best and most abundant, the grass consisted of one or two kinds only; and, on the contrary, that where the surface was nearly bare, the greatest varieties of grasses appeared, as if all struggling for existence." It was hoped that the Bogan would afford the means of access to the Darling at all times, by insuring the traveller on its banks against the chief impediments to travelling in Australia, namely—the want of water in periods of drought, and the results of its superabundance during seasons of rain; for water, it was considered, would always be found in its channel, at least in ponds, while no floods could reach the rising grounds over the left bank of the river. This expectation of the constant supply of water retained in the Bogan has not been realized: for Sir Thomas Mitchell, in December 1845, was compelled to abandon his intended route by this river, from the scarcity of this first necessity of life. About twelve miles below the junction of the Bogan with the Darling, in $145^{\circ} 52' 12''$ E. long., $30^{\circ} 7' 4''$ S. lat., a stockade or block-house was erected by Sir Thomas L. Mitchell, in 1835, on a spot which he named Fort Bourke, and describes as "surpassing anything he had expected to find on the Darling." It consisted of the highest ground rising gradually from the lower levels, by which the river is approached from the Bogan, to an elevated and extensive plateau, overlooking a reach of the river, a mile and-a-half in length, the hill being situated near a sharp turn at the lower end of the reach. At this turn a small water-course enters, which surrounds Fort Bourke on all sides, save that of the river; it encloses about 160 acres, containing abundance of grass. The plateau consists of rich loam; and, when first visited, was thinly wooded. Upon it were found various burying-places of the natives, who always choose the highest parts of that low country for the purpose of interment.* On the 1st June, 1835, the surveyor-general (Sir T. L. Mitchell), embarked in his whale-boats on the Darling at Fort Bourke: and the following extracts

* Mitchell's *Expeditions into Australia*.

from his journal show how little reasonable hope can be entertained of ever rendering the Darling useful as a navigable river:—"We proceeded well enough some way down the river, but at length a shallow reach first occasioned much delay, and afterwards rocks so dammed up the channel, that it was necessary to unload and draw the boats over them. Our progress was thus extremely slow, notwithstanding the activity and exertions of the men, who were constantly in the water, although a bitter cold wind blew all day. By sunset we had got over a bad place, where there was a considerable fall, when, on looking round the point, we found that the bed of the river was full of rocks to the extent of nearly a mile." (Sir Thomas explains elsewhere, that what he here terms rocks is but the ferruginous clay which fills the lowest part of the basin of this river.) "These unexpected impediments to our progress down the river determined me to return to the depôt with the boats, and afterwards to explore its course on horseback." On June 4th, he tells us, "a rocky dyke crossed the stream in a N.N.W. direction. This must," he adds, "have been another of the many impediments to our boat navigation had we proceeded by water, and from the general appearance of the river, I was satisfied that a passage with boats could not have been attempted in its present state, with any prospect of getting soon down." On June 10th he reached Sturt's furthest, below which the river formed a cataract of about two feet. On 17th June he found deep water; but, on the 19th, the river was so shallow that it seemed almost possible to step across it, and no deep reaches appeared in its bed. This was nearly 120 miles below Fort Bourke. On 24th June, there was a fall of about four feet. On 26th June, he forded the Darling: 200 miles from Fort Bourke the river had the same character as about that locality—a slow current, and an equal volume of water. Below this, on a ride of twenty-three miles, the channel became very contracted, and containing many dead trees, had altogether a diminished appearance. On the 8th July, the country was such as to remind him of the deserts in Asia or Africa. On the 11th July, he says, "I had traced its course upwards of 300 miles, through a country which did not supply a single stream, all the torrents which might descend from the sharp and naked hills being absorbed by the thirsty earth.

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Over the whole of this extensive region there grew but little grass, and few trees available for any useful purpose, except varieties of acacia, a tree so peculiar to these desert interior regions, and which there seemed to be nourished only by the dews of night." And respecting this country, he adds, "We saw neither kangaroos nor emus, a sufficient proof of the barrenness of the adjacent country." The furthest point reached was near that now called Laidley's Ponds. Of this whole extent, Sir Thomas says elsewhere—"The average breadth of the river at the surface of the water, when low, is about fifty yards, but oftener less than this, and seldom more. I cannot think that the velocity of the floods in the river ever exceeds one mile per hour, but that it is, in general, much less. At this time the water actually flowing, as seen at one or two shallow places, did not exceed, in quantity, that which would be necessary to turn a mill."

The more recent accounts of captain Sturt accord only too entirely with the unfavourable remarks above quoted. In October, 1844, in his desert expedition (p. 387), he made the Darling about fifteen miles above its junction with the Murray, and found it with scarcely any water in its bed. The river, says captain Sturt, must have been in the state in which we found it for a great length of time, and I am led to infer, from the very grassy nature of its bed, that it seldom contains water to any depth, or length of time, since in such case the grass would be killed. Its flats are backed by lagoons, but they had long been dry, and the trees growing round them were either dead or dying. During a single night the Darling was converted, from an almost dry channel, into a foaming and impetuous stream, sweeping everything away on its turbid waters at the rate of three or four miles an hour, and in four days it overflowed its banks. On the return of the expedition homewards in the following year, some two months later in the season, there had been no recurrence of the flood of the previous year, but the Darling was at a still lower ebb than before, and every lagoon and creek in its vicinity had long been exhausted and waterless. The water is described by Mitchell as being in all parts as transparent as that of the purest spring well, entirely losing all brackish taste below an extreme point of Dunlop's Range, where a hill consisting of a very hard breccia closes on the river so as to separate the plains

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above it from those lower down. The taste of the water was found to be worst where the river is nearest to D'Urban's Group—above that, at the junction of the Bogan, and for seventeen miles from thence downwards, it was excellent.

The *Williorara*, or *Laidley's Ponds* was supposed to be a mountain stream flowing in a south-westerly direction into the Darling, which it joins in about $142^{\circ} 26'$ E. long. $32^{\circ} 26'$ S. lat. By it captain Sturt hoped to penetrate the northern interior, but on examination it proved to be merely a channel of communication between two lakes that were on either side of it, called Minandichi and Cawndilla, to which it conveyed the surplus water of the Darling during the floods. It was about fifty yards broad, with low muddy banks, and its course of about nine or ten miles was exceedingly tortuous, but almost due west. Cawndilla lake is merely a shallow basin of considerable extent, filled by the river floods, and retaining them for a short time only. Immense quantities of fish, however, pass into these temporary reservoirs, and the floods are consequently looked for by the natives with anxious expectation. Sir Thomas Mitchell when concluding his account of the Darling, in 1835, makes the following remarks, which illustrate some of the characteristics of this singular river too clearly to be omitted here, although in perusing them the reader must bear in mind that the river was visited by the surveyor-general during a favourable season, and therefore bore a very different aspect to that under which it has been seen by subsequent travellers:—

“From the sparkling transparency of this water, its undiminished current sustained without receiving any tributary throughout a course of 660 miles, and especially from its being salt in some places and fresh at others, it seems probable that the current, when in that reduced state, is chiefly supported by springs. It would appear that the saltiness occurs when the springs also fail, and may be attributed to the same causes, whatever they are, by which all known waters unconnected with springs or streams are said to become salt. The bed of the river is at an average depth of about sixty feet below the common surface of the country. To this depth the soil generally consists of clay, in which calcareous concretions and selenites occur abundantly; at other parts the clay impregnated with iron forms a soft kind of rock in the bed, or banks of the river. There are no traces of water-courses on these level plains, such as might be expected to fall from the hills behind. The hills, nevertheless, contain some hollows and gullies which must, in wet seasons, conduct water to the plains; the distance of such heights from the river being seldom less than twelve miles, and it would appear that the intervening country is of such an absorbent

nature, and so extensive, that any torrents from the higher country are imbibed by the soft earth, for the hollow parts are seared with deep broad cracks, which in wet seasons must take up and retain much water, until it is either evaporated, or sinks to lower levels. The water may thus be absorbed and retained for a considerable time, and escape by slow drainage into the river, especially where the lower parts of such plains are shut in by hills approaching the channel. Thus, where the extremity of Dunlop's range shot forward into the wide level margin, we found that the water had lost all taste of salt, a circumstance most easily accounted for, by supposing that springs being more abundant there, from the near vicinity of the hills, had diluted the water which we had found salt higher up.

“The marks of high floods were apparent on the surface, to a distance frequently of as much as two miles from the ordinary channel. Within such a space the waters appear to overflow, and then to lodge in hollows (covered with *polygonum junceum*), and which were then full of yawning cracks. Such parts of the surface would naturally become first saturated in times of flood, and be the last to part with moisture in seasons of drought. I observed that there was less of that kind of low ground where the water was saltiest, which was to the westward of D'Urban's group.

“The basin of the Darling, which may be considered to extend to the coast ranges on the east, appears to be very limited on the opposite or western side, a desert country from which it did not receive, as far as I could discover, a single tributary of any importance. A succession of low ridges seemed there to mark the extent of its basin, nor did I perceive in the country beyond, any ranges of a more decidedly fluvial character.

“Some of the hollows behind the immediate banks on both sides contained lagoons; in some of these, reeds had at length taken the place of water; in others, the first coating of vegetation which the alluvium receives on exposure to the sun, consisted of fragrant herbs, and amongst them we found the scented trefoil (*trigonella suavissima*), which proved an excellent anti-scorbutic vegetable when boiled. The surface of the earth near the river is unlike any part of the earth's face that I have elsewhere seen. It is as clear of vegetation as a fallow-field, but with greater inequality of surface, and full of holes. The soil is just tenacious enough to open into cracks, for the surface becomes so soft and loose that the few weeds that may have sprung up previous to desiccation seldom remain where they grow, being blown out by the slightest wind. Over such ground it was fatiguing labour to walk, the foot at each step sinking in to the ankle, and care being necessary to avoid holes always ready to receive the whole leg, or sometimes a man's whole body. The labour which this kind of ground cost the poor bullocks, drawing heavy carts, reduced them to such a state of weakness, that six never returned from the Darling.” “Of the hills in general it may be observed, that those on the left bank are most elevated at the higher parts of the river, whereas those on the right bank rise into greatest height towards the lower parts of the river, as far as explored by us. The plains extend on each side of the channel to a distance of six or seven miles, and are in general clear of timber. That deep and extensive bed of clay, so uniformly filling the basin of this river, has every appearance of mud deposited. Behind them the

country is sparingly wooded, except by the stunted bush (*myoporum montanum*), which forms a thick scrub, especially on the side of the low hills. On the river bank, trees peculiar to it grow to so large a size, that its course may be easily distinguished at great distances, and thus these facilitated our survey in a very great degree. These gigantic trees consist of that species of eucalyptus called blue gum in the colony. Its searching roots seem to luxuriate in the banks of streams, lakes, or ponds, where it is so constant to moisture, that the thirsty traveller soon learns to recognise its shining trunk and white gnarled arms, as the surest guides to water. The alluvial portion of the margin of the Darling is narrow, and in most places overgrown with the dwarf box, which is another species of eucalyptus. In this alluvial part there are hollow places as already observed, covered with the *polygonum junceum*, which is an unsightly leafless bush or bramble. Grass is only to be found on the banks of the river, for, strictly speaking, the margin only can be considered alluvial, for this being irrigated and enriched by the floods, is everywhere productive of grass, which grows there abundantly, even where none appears in the back country.

"In the back-ground beyond the plains, some casuarinæ and eucalypti are occasionally seen in the scrubs which grow on the red sand, and an acacia (having a white stem, the bark being much spotted) there grows to a considerable size, and produces much gum. Indeed, *gum acacia* abounds in these scrubs, and when the country is more accessible, may become an article of commerce.

"The plants, though in general different from those nearer the colony, were few, but curious. Of grasses I gathered seeds of twenty-five different kinds, six of these growing only on the alluvial bank of the Darling. Among these were a *poa*, and the *chloris truncata*, and *stipa setacea* of Mr. Brown. The country was, nevertheless, almost bare, and the roots, stems, and seeds, the products of a former season, were blown about on the soft face of the parched and naked earth, where the last spring seemed indeed to have produced no vegetation, excepting a thin crop of an umbelliferous weed.

"The natives of the Darling live chiefly on the fish of the river, and are expert swimmers and divers. They can swim and turn with great velocity under water, where they can both see and spear the largest fish, sometimes remaining under water for this purpose a considerable time. In very cold weather, however, they float on the surface in pieces of bark; and thus also they can spear the fish, having a small fire beside them in their bark canoe. They also feed on birds, and especially on ducks, which they ensnare with nets, with which a tribe is always provided. These nets are very well made, much resembling our own, and of a similar material, the wild flax, which grows near the river in tufts, and thus very convenient to pull. These are easily gathered by the

gins, who indeed manage the whole process of net-making. They give each tuft (after gathering it) a twist, also biting it a little, and in that state their flax is laid about on the roofs of their huts until dry. Fishing-nets are made of various similar materials, being often very large, and attached to some I have seen half-inch cordage, which might have been mistaken for the production of a rope-walk. But the largest of their nets are those set across the Darling for the purpose of catching the ducks as they fly along the river in considerable flocks. These nets are strong, with wide meshes, and they are hung up on a lofty pole erected for the purpose on one side, usually opposite to some large tree on the other, being easily suspended upon these supports, as occasion requires; such poles are permanently fixed, supported by substantial props, and it was doubtless one of this description that captain Sturt supposed to have been erected to propitiate some deity.

"The native knows well 'the alleys green' through which at twilight the thirsty pigeons and parrots rush towards the water, and there with a smaller net hung up, he sits down and makes a fire ready to roast the birds which may fall into his snare."

The ana-branch, or ancient channel of the Darling, is described by Eyre, who discovered it, as running through the scrub half-way between Lake Victoria and the main stream, with a course of fully sixty miles, nearly parallel to the latter. This singular watercourse forms, in times of flood, another connecting channel between the Darling and the Murray, leaving an immense desert island of low or scrubby lands between it and the Darling. At such times it has a strong current running upwards, caused by the back-waters of the Murray. According to captain Sturt, it has a broad channel and long reaches, but is wholly wanting in pasture, or timber of any size. The plains of the interior formed the banks, and nothing but salsolacæ grew on them. No water, he says, ever flows down the ana-branch into the north.

Victoria River, the *Warrego*, and other streams discovered in 1846, by Sir Thomas Mitchell, and subsequently visited by his able assistant, Mr. Kennedy,* have been already referred to (pp. 393, 394); nor is there, as far as I am aware, sufficient information possessed concerning these streams to furnish a more detailed description.

* When writing of the expedition conducted by this brave but unfortunate gentleman (p. 395), I mentioned that he was supposed to have perished in an encounter with the natives. He was sent to survey the country lying between Rockingham Bay and Cape York, but the stock of provisions being well nigh exhausted, Mr. Kennedy divided his party, and proceeded towards Cape York, in the hope of procuring the supplies which had been forwarded from Sydney by water. Of the nine men left behind, seven perished of ague, produced by over-

fatigue and food both insufficient and unwholesome, for they were compelled to eat the flesh of the wretched horses dried in the sun; and the last survivors (one of whom was Mr. Carron, attached as botanist to the expedition), were too weak to bury their deceased comrades. The fate of those who accompanied Mr. Kennedy was equally melancholy; one of them, named Costigan, accidentally shot himself, and Mr. Kennedy leaving him in the care of two others, pursued his way, in the hope of obtaining speedy succour accompanied only by his faithful

COUNTIES.—New South Wales, according to the "Blue Book" of 1846, contains twenty-two counties, whose area, population, number of acres under cultivation, and produce, will be given in a subsequent chapter. To this number several others have been, or are on the point of being, added. These divisions are so little dwelt upon, and indeed so rarely alluded to, by the writers on the topography of New South Wales (Mitchell alone excepted), that I have found it difficult, after a careful examination of the writings of Oxley, Lang, Braim, and others, of the excellent local journals, and of the colonial and geographical magazines published in England, assisted by the information acquired by personal observation, to furnish anything approaching a clear or detailed description of the counties. Dr. Lang, in his valuable work on New South Wales, remarks, "that, except in government deeds or legal documents, the grand natural divisions of the country are the only ones known

attendant, an aboriginal named Jackey Jackey, through a country swarming with hostile natives. These savages, according to Jackey's statement, came stealthily behind, and hiding in the scrub, threw large jagged wooden spears at them, by which both they and the horses were wounded. Kennedy fell to rise no more, his last injunction to his weeping follower being, to endeavour to preserve his papers and to convey them to the governor. The poor boy, following the directions of his unhappy master, succeeded in reaching Port Albany, and informing the captain of the schooner lying there with supplies, of the sad results of the expedition. Captain Dobson hastened to Shelburne Bay, but arrived there, as before stated, in time to save two only of the ill-fated band. Jackey Jackey's account of the death of poor Kennedy is so simple and pathetic, that I cannot resist quoting it here:—

"I asked him, 'Mr. Kennedy, are you going to leave me?' and he said, 'Yes my boy, I am going to leave you;' he said, 'I am very bad, Jackey; you take the books, Jackey, to the captain; but not the big ones, the governor will give anything for them.' I then tied up the papers; he then said, 'Jackey, give me paper, and I will write.' I gave him paper and pencil, and he tried to write; and he then fell back and died, and I caught him as he fell back and held him, and I then turned round myself and cried; I was crying a good while, until I got well; that was about an hour, and then I buried him; I dugged up the ground with a tomahawk, and covered him over with logs, then grass, and my shirt and trousers; that night I left him near dark. I would go through the scrub, and the blacks threw spears at me, a good many, and I went back again into the scrub; then I went down the creek which runs into Escape River, and I walked along the water in the creek very easy, with my head only above water, to avoid the blacks and get out of their way; in this way I went half-a-mile; then I got out of the creek and got clear of them, and walked on all night nearly, and slept in the bush without a fire. I went on next morning,

or recognised by the colonists, who accordingly speak only of the districts of the Hawkesbury, of Hunter's River, of Bathurst, of Illawarra, of Argyle, and of Port Macquarie. For the colonial readers, therefore, of the present day, who have not yet arrived at the feeling of countyship (if it may be so termed) manifested in the mother country, a separate delineation of the counties may not be necessary; but the want of it would, I think, be felt by readers in the United Kingdom; and it is to them more especially that I would fain render familiar the state of this and every other British colony, sure that (under Providence) much benefit would thereby result. The following is a brief account of the oldest established counties. The first in point of settlement—

Cumberland county, has a coast line, stretching southward, of about fifty-six miles, and an extreme breadth, from the sea to the base of the Blue Mountains, of forty-six miles.

and felt very bad, and I spelled for two days; I lived upon nothing but salt-water. Next day I went on and camped one mile away from where I left, and ate one of the pandanos; on next morning I went on two miles, and sat down there, and I wanted to spell a little there, and go on; but when I tried to get up, I could not, but fell down again very tired and cramped, and I spelled here two days; then I went on again one mile, and got nothing to eat but one nondo; and I went on that day and camped, and on again next morning, about half a mile, and sat down where there was good water, and remained all day. On the following morning I went a good way, went round a great swamp and mangroves, and got a good way by sundown. The next morning I went and saw a very large track of black fellows. I went clear of the track and of swamp or sandy ground; then I came to a very large river and a large lagoon; plenty of alligators in the lagoon, about ten miles from Port Albany. I now got into the ridges by sundown, and went up a tree and saw Albany Island. Then next morning at four o'clock, I went on as hard as I could go, all the way down, over fine clear ground, fine iron bark timber and plenty of good grass; I went on round the point (this was towards Cape York, north of Albany Island) and went on and followed a creek down, and went on top of the hill and I saw Cape York; I knew it was Cape York, because the sand did not go on farther; I sat down then a good while; I said to myself, this is Port Albany, I believe inside, somewhere. Mr. Kennedy always told me that the ship was inside, close up to the main land; I went on a little way and saw the ship and boat. I met close up here two black gins and a good many piccaninies; one said to me, 'powad, powad,' then I asked her for eggs—she gave me turtles' eggs, and I gave her a burning-glass; she pointed at the ship, which I had seen before; I was very frightened of seeing the black men all along here, and when I was on the rock, cooeing, and murry murry (very, very) glad when the boat came to me."

The Hawkesbury and Nepean rivers form seven-eighths of the inland boundary of this county, which, notwithstanding its inferiority in size and the general character of its soil, is the most important and the most densely populated of them all, Sydney, the capital of the colony, being situated in it, and also the towns of Paramatta, Liverpool, Windsor, Richmond, and Campbell-town.

The maritime boundary is generally bold and deeply indented. For the distance of five or six miles from the sea, the country wears a bleak and barren aspect, consisting of ridges of stratified sandstone; the soil poor, in some places swampy, and clothed with a few stunted eucalypti and dwarf underwood.

Beyond this coast-girdle the aspect begins to improve; an undulating country extends for ten miles; and where the hand of civilization has not been in active operation, a stately forest of eucalypti, varied with a species of casaurina, appears, diversified here and there with farms and tenements, and intersected by broad and excellent turnpike roads; but the soil in this belt is still poor on the surface, as it rests on a sandstone formation. At the distance of twenty to twenty-five miles, the forest is lofty, but not dense; there is little or no underwood, and the average number of trees to the acre does not exceed fifty; while a charming variety of hill and dale, clothed with luxuriant herbage, is covered with bleating flocks and lowing herds, among which may be seen, at intervals, the spacious mansion or snug farm-house of civilized man. Throughout the whole of the county, from the sea-coast to the base of the Blue Mountains, the land can scarcely be considered elevated, but is a continued series of undulations, until it approaches the Nepean and Hawkesbury rivers, which are bordered by extensive plains of extraordinary fertility. Formerly, one immense tract of forest land, covered with very heavy timber, extended with little interruption from below Windsor to Appin, a distance of fifty miles; of which a large portion is now cleared and under cultivation. The rocks in this tract are either

common or calcareous sandstone, ironstone, and in some few places whinstone: these form soils of various degrees of goodness, the whinstone generally the best. In some places small pebbles of ironstone, not larger than peas, may be found scattered over the surface. This, wherever it occurs, is a sure sign of a poor hungry soil.*

Prospect Hill, the most conspicuous eminence in Cumberland, is situated near the centre of that county. It is cultivated nearly to the summit, and the rich red soil on the trap rock is remarkably productive.

The land, on approaching Port Jackson from the southward, appears low, compared with the coast of the Illawarra district: the cliffs near Port Jackson are about 200 feet in height; and in general effect and outline, though darker coloured, not unlike the far-famed Dover cliffs of Albion.

Suddenly an abrupt breach is seen in this sea-wall, against which the vast volume of water in the Southern Pacific is rolled with incessant swell; but the moment the tempest-tossed mariner has fairly passed through this singular cleft or fissure, the waters are as tranquil as a mill-pond. On the south head of the entrance of Port Jackson an excellent lighthouse† was erected by governor Macquarie, which captain Stokes says he saw, in H.M.S. *Beagle*, at a distance of thirty miles, from a height of fifty feet, during the period of a clear atmosphere.

The capital of New South Wales, named in honour of Viscount Sydney, his Majesty's secretary of state for the colonies in 1788, is situated in 35° 52' S. lat., 151° 17' E. long. For nearly a quarter of a century after its original establishment on the shores of Sydney Cove (Port Jackson), the now important city was little more than an insignificant village of bark huts and wooden skillings, scattered here and there among fields and gardens. Soon after the arrival of governor Macquarie, a survey was made of the whole locality, and the future town marked out on a regular plan.

Sydney is built partly on a small promontory, and partly in a narrow ravine or valley.

* *Account of New South Wales*, by James Atkinson, Esq.

† The lighthouse is in 33° 51' 40" S. lat., 151° 16' 50" E. long.; the tower is admirably built; the height of the light (a revolving one) from the base being 76 feet, and above the sea 277 feet,—total 353. The inner S. head bears from the lighthouse N. by W. $\frac{3}{4}$ W. distant a mile and-a-quarter. The outer N. head bears from it N. by E. two miles. The inner S. and

outer N. heads lie N.E. $\frac{1}{2}$ E. and S.W. $\frac{1}{2}$, of each other distant a mile and one-tenth. The light can be seen from S. by E. to N. by E., and from a ship's deck, on a clear night, eight to ten leagues, appearing like a luminous star. Bearings magnetic, distances nautical—variations 9 degrees E.

N.B.—The N. end of the "Sow and Pigs" rocks, near which there is a light, bears from the inner S. head S. W. by W. half a mile.

The formation on which it stands is a free-stone rock, which passes inland for about two miles, in undulating and nearly parallel ridges, in a direction almost due south of that portion of Port Jackson generally known as the *Stream*, or *Middle Harbour*, which, with Sydney Cove and Darling Harbour, encloses greater part of the city on three sides. The ridges decline as they recede from the Middle Harbour, until they terminate in an almost level plain, bounded on the south by a transverse range of elevated rock, known as the Surry hills, which comprise the southern suburbs.*

The views from the higher part of the capital are bold, varied, and many of them very picturesque; the magnificent harbour of Port Jackson, like a lake studded with islets, indented with coves of singular beauty, whose tranquil recesses afford a secure haven to hundreds of vessels, is ever an attractive object; while inland, the diversity of hill and dale, of rock and woodland, of grassy slopes and brilliant parterres, interspersed with princely mansions, cottage ornées, and substantial homesteads, combine in forming many charming prospects.

The position of Sydney admirably adapts it for the centre of a commercial empire. Its haven, which is about fifteen miles long, and, in some places, three miles broad, is completely land-locked. Along the water-side, except that portion occupied by the demesne contiguous to government house, there are wharfs, stores, ship-yards, mills, various manufactories, distilleries, steam engines, breweries, &c.; behind these, in irregular succession, rise the numerous public and private buildings of the Australian metropolis. In several parts, ships come close alongside the wharfs, and their cargoes are hoisted direct from the hold into the warehouses. The streets are laid out generally at right angles; thirty-four of them

* By an act for regulating the police in the town and port of Sydney, and for removing and preventing nuisances and obstructions therein, which came into operation 30th September, 1833, the boundaries of the town of Sydney, port of Sydney, Sydney Cove, and Darling Harbour, were thus fixed:—

Town of Sydney.—Bounded on the north by the waters of Port Jackson, from a land-mark at the head of Blackwattle Bay to Rusheutter's Bay; on the east by the stream entering Rusheutter's Bay, to a bridge on the South Head Road, at the north-west corner of Sydney Common; and by the western boundary of that common to a road extending westward to the back of Cleveland House; on the south by that road and its western fence, prolonged to a land-mark on the road to Cook's River; on the west by the western side of the road to Cook's River, and

have each a carriage-way of not less than thirty-six feet, (several have from forty to sixty feet), and a foot-way of not less than twelve feet. Their length varies from one to three miles; they are well paved or macadamized, regularly cleaned, watered, and lit with gas. George-street and Pitt-street have continuous ranges of handsome cut stone or brick edifices, with shops that would do no discredit to Regent or Oxford-street, London. Indeed, the modern structures generally, may, in several respects, fairly vie with those of an European capital; and many of the older houses, though constructed with little pretensions to taste, were yet (owing to the abundance of good brick earth, and excellent building stone, so easily obtainable,) strongly and usefully built; and, with their neat gardens in front, present a cheerful appearance.

The recently-erected government-house, which stands in a conspicuous position, overlooking Sydney Cove, is a very handsome structure, built of white freestone, in the Elizabethan style of architecture. Its foundations are laid in the solid rock, out of which the basement and cellars are quarried; and the whole tower, at the north end, seventy feet high, and twenty feet square, with a flag-staff, thirty feet high, forms a striking feature from the harbour, of which the house commands a fine view. The building is 170 feet long, and 40½ high; the ball-room, 50 feet by 28 feet; drawing-room, 40 by 28; ante-room, 15 by 28; dining-room, 45 by 26. All the rooms are 26 feet high, and finished in superb style; the staircases are of carved cedar, and the chimney-pieces of fine colonial marble. The cost to the colonists has, I believe, been between £50,000 and £60,000. The contrast is very great between this princely mansion and the canvass house of the first governor of New South Wales, or with the that line prolonged to the land-mark at the head of the Blackwattle Bay.

Port of Sydney.—The channel extending westward from the heads of Port Jackson to Long Nose Point, including Sydney Cove, Darling Harbour, and extending one mile up Middle Harbour, and the various other bays or inlets on each shore thereof.

Sydney Cove.—The waters included within a line extending from Dawes' Point to the north-west bastion of Fort Macquarie, and the shores to the southward of this line.

Darling Harbour.—The waters included within a line extending from Dawes' Point to the south-east point of the shore nearest to and opposite to Goat Island; the shores of this harbour on the side of the town, and those opposite to them.

wretched wooden tenements in use for several years.

There are numerous temples dedicated to the worship of God; among which are, five large and commodious Episcopalian churches, besides a missionary Congregational church; three Presbyterian churches; two Roman catholic—St. Mary's cathedral and St. Patrick's church, both spacious edifices, highly ornamented; five or six Wesleyan chapels; a Baptist chapel; one Australian Methodist chapel; a Friends' meeting-house; and a Jewish synagogue.

St. Andrew's Cathedral was constructed as the Episcopal church of Australia, on the creation of a diocese in communion with the church of England; the foundation stone was laid in May, 1839, under the auspices of the first bishop of Australia. This handsome edifice is 720 feet from east to west, including the tower, whose pinnacles have an elevation of 120 feet. The height of the body of the church is seventy feet. It will contain a congregation of about 2,000. The expense of its erection is estimated at £50,000, towards which the inhabitants contributed largely; one family alone, that of Robert Campbell, M.C., subscribed £500.

The Roman Catholic Cathedral is the largest and most expensive sacred edifice in the colony; it was commenced in 1820, and it is not yet completely finished. Built of freestone, in the form of a cross, it is an excellent specimen of Gothic architecture, and being situated in a commanding position in Hyde-park, is now an ornament to the city.

St. Phillip's Church has a peculiar interest attached to it, as being the oldest place of worship in the colony. Commenced in July, 1793, it was several years before it was fitted for the celebration of divine service. George the Third regarded its erection with deep

interest; and not content with expressing his satisfaction that such a building was in progress, his Majesty forwarded to the colony (from his private purse) a costly communion service of plate, which arrived safely in October, 1803, and is still used in this church. The earnest solicitude evinced by the king expedited the building, which was consecrated on Christmas Day, 1810. It is a plain, useful structure, with a round tower which commands an extensive prospect.*

St. Andrew's Kirk, a handsome Gothic church, was commenced in November, 1833, and finished in September, 1835. The walls are elevated, and include a spacious area, there being a projecting entrance in front, leading to the gallery. Between the main windows there are square buttresses, and two circular turrets surmounted by pointed spires. The interior is admirably fitted up; the groined arches of the ceiling rest upon six fluted columns with ornamented capitals; the cedar pannels and Gothic framing are particularly handsome. The government gave the site for the building, but the cost of the kirk was chiefly defrayed by subscriptions from members of the established church of Scotland.

St. James' Church occupies a commanding site at the north end of Hyde Park. The foundation was laid in October, 1819, by governor Macquarie, and it was completed about the end of 1822. It is in the Grecian style of architecture, with a lofty spire and belfry, and is constructed of bricks, strengthened by large and handsome pilasters of free-stone. There is a superior organ at the end of the church, and the pulpit is of excellent workmanship.

The *Scots' Kirk* is a substantial plain building, and the other temples of worship are well constructed. As population in-

* The deep interest taken by the "good old king" in the establishment of the first Christian church erected at the antipodes, where there are now five Protestant dioceses, viz., Australia (Sydney), erected in 1836; New Zealand, 1841; Tasmania (Van Diemen's Land), 1842; Melbourne (Port Phillip), 1847; and Newcastle (New South Wales), 1847—was in unison with his well-known piety of character; a piety in the exercise of which he continued to manifest the reasoning power, in other respects entirely dethroned. During the awful lunacy with which the mind of George the Third was afflicted, his spirit remained unclouded in its devotion, and during his wonted hours of prayer, his Majesty's supplications were daily uttered to the Almighty disposer of events—that the Lord of Heaven and Earth would bestow especial care and favour on the nation, deprived by His will of the superintendence of their lawful sove-

reign, and that He would be to the people of these realms their temporal as well as spiritual King, directing aright the counsels of those to whom the supreme power was delegated. The transmission of a communion service to St. Phillip's church at Sydney, is in perfect accordance with the deep reverence of his Majesty for that holy and indispensable ordinance. It is not generally known that some time before the demise of George the Third, his Majesty expressed an earnest desire to receive the Sacrament. The clergy and the medical attendants on his Majesty did not think it advisable to grant the request, whereupon the king solemnly administered the bread and wine to himself, with a fervent prayer that if in this he committed the sin of presumption, he might be forgiven—no other means being left for his obedience to the divine command, or the satisfaction of his deep yearning for the comfort of the Holy Sacrament.

creases, new churches and chapels are built, and Sydney is, on the whole, better provided with the means of enjoying public worship, than many districts of London—where, it will be remembered, there was recently one parish with 20,000 inhabitants, and only one church.

The *Sydney College* owes its existence chiefly to a private individual, Dr. Bland, who was originally a surgeon in the royal navy, but was transported along with a lieutenant of the ship in which he served, for being engaged in a fatal duel with another officer of the ship. Dr. Bland has long been known as the good Samaritan of Australia; possessed of great skill in his profession, of high general attainments, a gentleman by birth, education, and feeling, he acquired the esteem of general and lady Darling, and of all classes in the colony. Wealth was poured freely into his hands by the affluent, and its recipient as quickly passed it away to the poor; not satisfied merely with contributing both by his skill and pecuniary charity, to alleviate the physical suffering of his fellow-creatures, Dr. Bland took the lead in the formation of a grammar-school in 1825; in 1828–9 the worthy doctor made a successful effort to enlarge and improve the institution; in 1830 the grammar-school expanded into Sydney College, with a fund of £10,000, subscribed in 200 shares of £50, each share entitling the holder in perpetuity to the nomination of one student at the college. The Old and New Testament are read without note or comment; no religious book is used without the authority of the president, and a committee of fifteen members, elected annually by the aggregate body of trustees. The building is commodious, and the course of education in classics, mathematics, and natural philosophy, good.

The *Australian College* was instituted 31st December, 1831; it combines a series of schools for the education of youth in the elementary branches of education, and gradually extends to the higher course of instruction. The buildings are in chaste style, large, and capable of containing more than 100 boarders; like the Sydney College, it is not confined to any particular religious denomination. A chapter in the Bible is read by each teacher every morning in the presence of all the pupils attending his class.

There is a *Normal* institution for secular education alone, and many excellent semi-

naries for both sexes. The Sunday schools are well attended.

Among the other public structures in Sydney, is the *Theatre Royal*, which cost £10,000 in building; the colonists truly aver, that it "would be an ornament to the Great Babylon." The architectural description given of it, is as follows:—

"In front of the theatre there are two splendid shops, between which there is a spacious entrance to the lower and upper boxes, enclosed by a pair of massive iron gates. The saloon leading to the two tiers of boxes, is divided for an entrance for each portion of the visitors. The interior of the house is arranged into two circles of boxes, with several private and family boxes; an extensive pit, with raised seats, and a spacious gallery. To the lower circle of boxes is attached an elegant dress saloon, 40 feet by 20. The size of the theatre is 100 feet by 53; the stage, 52 feet by 47; the opening of the proscenium, 8 feet; distance from front to front of the boxes, 27 feet; also, a commodious orchestra, with the necessary green and dressing-rooms; the height of the building is 50 feet. The whole is fitted up in the modern style, with a handsome glass chandelier in the centre of the roof, and the building is so arranged, that in case of fire, all parts of the house have communications for escape."

The theatre was erected by Mr. Barnett Levy. In the early days of the colony, the "legitimate drama" was performed in the gaol of Sydney. The public Banks are all substantial, and, in some instances, ornamented buildings; the Head Police Office, Benevolent Asylum, Prisoners' Barracks, Post Office, deserve a record for their suitability to the purposes for which they were constructed. The Soldiers' Barracks are large and plain. Indeed, the number of good mechanics among the convicts, and the vigilant superintendence of engineer officers, have materially contributed to secure for Sydney a very superior order of public edifices. A handsome range of stone buildings, with a noble colonnade forming a verandah and balcony, contains the *Legislative and Executive Council Chambers*, and two spacious Hospitals. The *Court House* is built on an eminence in that portion of the suburbs termed the Surry hills, and adjoining it is the *New Gaol*, an excellent building well arranged for the classification and separation of prisoners. The gaol covers a considerable area of ground, it is erected on a hill, built of freestone, and surrounded by a massive wall thirty feet high. The *Custom House* and the *Public Library* are designed upon an equally extensive and substantial scale. The *Public Markets* are held in a double range of narrow buildings about 200 feet in length, floored with freestone, the roofs

being supported by stone piers. A fountain of water in the centre of the amphitheatre tends to preserve cleanliness; at seven in the morning the ringing of a great bell announces the opening of the market, and throughout the day a vigilant police preserves order. The position of the market-place, in the centre of the city,* its commodious construction, and the peaceable manner in which business is carried on, enhance the effect produced on the eye of a stranger by the abundance, excellence, and cheapness of its varied supplies, and combine to form a scene which, could it be viewed by our over-worked and under-fed operatives, would preach more effectively in the cause of emigration to a *British colony*, than other arguments, though eloquent and sincere, and teach a new lesson to many of our political economists.

There are several small forts, but, as explained under the head of *military defences*, there is no protection where most needful—at the Heads of Port Jackson. The defences of the harbour are shewn in an official statement.

Fort Macquarie is situated at the extreme point of the eastern entrance to Sydney Cove, the access to which it directly commands. It is a permanent work of masonry—a square of 30 feet face, having a small circular bastion at each angle affording space for one traversing gun. Three faces of the square are open to the sea, one of which is pierced for three guns. Ten twenty-four pounders are mounted. The *terreplein* is twenty-two feet above the level of the sea. In the centre of the land face is a two-storied tower, with a magazine in the basement calculated to hold 350 barrels of gunpowder. The tower is intended to cover a small detachment of soldiers, with the necessary stores for the battery. The land communication is by a permanent bridge over a dry rock. This work will take in reverse any work erected on Pinchgut Island, from which it is distant 1,062 yards. A non-commissioned officer and twelve men are at present quartered in the tower; not more than six men in addition could be put under cover.

Fort Phillip is situated on the highest ground within the northern portion of the city; it appears to have been the intention

* No beast can be killed in Sydney without inspection and certificate from an inspector appointed by the government, and for the inspection a fee of threepence is paid. All slaughter-houses are licensed.

to construct a pentagon at this point, the sides measuring 100 feet. The work was commenced in 1804, and partly carried up to the height of eighteen feet, six inches; nothing further was done, the plan of the work, it is presumed, being found defective. The situation is highly favourable for a work of defence (a citadel), at an elevation of 157 feet above the sea; it commands a great part of the city of Sydney, the anchorage, and the access to Sydney Cove and Darling Harbour. It also takes in reverse Dawes' Battery, at the distance of 715 yards; Fort Macquarie, at 1,062 yards; and Pinchgut Island, at 2,124 yards. Six six-pounder guns are placed on one of the faces of the old work, for the purpose of a saluting battery. There is a permanent magazine at this point for 200 barrels of gunpowder; but no accommodation for troops.

Dawes' Battery is situated on the point forming the western extremity of Sydney Cove, which it separates from Darling Harbour. The work consists of an open *barbette* battery, capable of mounting six twenty-four pounders. It immediately commands Fort Macquarie, at a distance of 728 yards, and also commands the approach to, and anchorage in, the Cove. The platform of the battery is at an elevation of seventy feet above the sea, to which the glacis extends. There is no accommodation for troops.

Bradley's Head is a commanding point on the right approach to the city of Sydney by sea, distant about 4,596 yards. The battery, when completed, will mount seven twenty-four pounders. The site is important, commanding, as it does, the ship-channel, at 1,000 yards. Ships forcing this passage would immediately come under fire from a work at Pinchgut Island, distant 2,834 yards. This work was suspended in 1842, by order of the inspector-general of fortifications. There is no accommodation for troops.

Pinchgut Island is situated nearly mid-channel, on the approach to the city of Sydney, 1,062 yards from Fort Macquarie. A work on this point was put in progress in 1841, but suspended soon after, by orders from England. The work would intersect the fire from Bradley's Head, on the approach up the harbour, and would be supported by Fort Macquarie and Dawes' Battery. Vessels must pass within point-blank range of this spot.

Goat Island Magazine, at the entrance of Paramatta river, is the principal depôt for

gunpowder; there is a bomb-proof magazine capable of containing 3,000 barrels of gunpowder. There is barrack accommodation for a non-commissioned officer and a guard of twelve men, for the protection of the magazine.

The number and calibre of the guns in these forts is—mounted, 24; dismounted, 13; unserviceable, 15. Of the mounted, 16 are twenty-four pounders, 1 twelve-pounder, 1 nine-pounder, and 6 sixteen-pounders. Of the dismounted, 2 are twenty-four pounders, 4 are twelve-pounders, 2 are six-pounders.

Building land in Sydney is let at a very high rate; in George-street (the Regent-street of New South Wales) it has been sold at £20,000 per acre, and some ground at the rate of £50 per foot. Large sums have been expended on shops, stores, and ware-rooms; one auctioneer spent £5,000 in the enlargement of his premises. Hotels and inns are numerous; some on a large scale, which, in luxurious appointments and high charges, may vie with the first-rate hotels in the parent state. The *Royal Hotel* has, it is said, already cost £30,000, and will require a like sum for its completion. The ball-room and the coffee-room are of noble dimensions; the private apartments spacious and superbly furnished, and the dormitories “scarcely to be counted.”

The colonists are not sparing in efforts to improve and adorn the metropolis. There is a circular quay at Sydney Cove, on which there has been expended up to December, 1848, £27,709. The building for the colonial museum at Sydney has already cost in its construction about £6,000. On the new government-house, the residence of the representative of the queen, no less than £50,000 of the taxes raised from the colonists have been expended on the structure, although the original estimate was not more than £25,000. The new prison at Darlinghurst cost the colony up to December, 1848, fully £51,000. A general cemetery, termed the Necropolis, has been aided with £5,000 of the colonial revenues. New barracks have been built for the use of her Majesty's troops, and £60,000 have been appropriated for the purpose. More than £1,000 have been employed in making a dry dock at Cockatoo Island.

Hyde Park, a piece of land about two miles in circumference, has been judiciously reserved as a pleasure-ground for the citizens, and from its elevated and agreeable position will, when planted, surpass in beauty any of the parks attached to European capi-

tals, except Hyde Park, London, Phoenix Park, Dublin, and the Prater of Vienna. The Sydney gardens justly rank among the chief attractions of the city, and are situated on a slight elevation which rises gradually from a picturesque and secluded cove on the eastern side of the capital, and are distant about five minutes' walk from the new government-house. The site, plan, and arrangement of these gardens are all good. A stone wall, twenty feet high, which runs east and west, divides them into two portions. That on the south and land side is elevated, and devoted chiefly to botanical purposes: a magnificent pine of that most magnificent species, well named the *auracaria excelsa*, planted more than thirty years ago, first attracts the eye, while all around coral trees, with their rich scarlet flowers; bread-fruit trees from the Sandwich Islands; pomegranates; acacias, covered with beautiful parasites; bananas, Banksia, many descriptions of palms, and an infinite variety of other tropical trees are to be seen flourishing luxuriantly in the same ground with the oak, ash, and other English trees and plants. The northern or sea-coast garden extends for nearly a mile along the shore, and is laid out in winding walks, arbours, shrubberies, green slopes, and grassy terraces, elevated a few feet above the murmuring ripple of the glassy wave. In the centre of the garden is a pond surrounded by weeping willows of immense size, and in the centre stands a plain granite obelisk, dedicated to the memory of Allan Cunningham, the celebrated Australian botanist and traveller, whose indefatigable exertions and correct taste contributed materially to the formation of these gardens.* The government demesne, close to the gardens, is a well shaded and pleasing drive; and during the week-days the performances of one of the bands belonging to the regiment stationed at Sydney, adds to the pleasure of the gardens, which however seldom present so animated a scene as on Sundays, when thronged by all classes of the citizens.

Sydney is supplied with water, partly by wells sunk fifteen to thirty feet below the surface, and partly by a tunnel or subterranean aqueduct, about two miles and-a-quarter long, which conveys water from the Lachlan swamp to the south-east end of the city. Four-fifths of the tunnel, the whole of which averages five feet in width, and the

* *Sketch of New South Wales*, by J. O. Balfour, Esq., 1845.

same in height, is excavated in the solid rock, and the remainder is formed through sand, with chiselled masonry without cement. There are three offcuts, one forty-five feet in length, another eighty feet, and a third 284 feet, all of the same depth and width as the main tunnel; the entire mass of excavation throughout the work amounted to 255,930 cubic feet. Springs (met with in the progress of the work) furnish additional supplies to the aqueduct. The tunnel was commenced in September, 1827, and the expenditure on it up to the 30th of June, 1837, was £22,971. It furnishes water for about 30,000 of the citizens.

Sydney was incorporated in 1842, and the charter of incorporation entitles the citizens, holding tenancies of £25 per ann., to the control over all local affairs, excepting the police, the management of which still remains vested in the executive government.

The corporation of the city, under the authority of an act of the colonial legislature, 6 Vict., No. 3, section 67, levy a rate, by assessment, on the inhabitants of the city; and under the 70th section of the Act of Incorporation, a police rate is raised by assessment. There are other sources of income for the corporation, viz.—a water rate for water laid on to houses; lighting rate; rent of three fountains in the city; markets, fines, fees, and licences. The revenue raised, under several heads, was—

Items of Revenue.	1845.	1846.	1847.	1848.
City rate assessed	£2,621	£2,086	£5,461	£6,037
Police fund	3,115	—	—	—
Markets, dues, and rents . . .	2,344	2,225	2,488	2,600
Fees and fines	862	1,086	1,323	1,873
Licences, &c.	12	5	—	—
In aid of city fund	129	14	—	—
Water rate and licence	—	1,199	1,331	1,863
Lighting rate	—	—	804	216
Total	10,191	6,618	11,409	12,591

* In compliance with the wishes of correspondents that this work should be a reference for mercantile men as to the commission, agency, and other charges in our several colonies, I give the following data relative to New South Wales; but at the completion of the whole work there will be given with the last volume a statement of the rates of interest of money, commission and agency charges, rates of insurance, tariff of customs, &c., in the several dependencies of the British crown.

General rates of agency, commission, and warehouse rent, agreed on at a meeting of the New South Wales chamber of commerce:—

Commission per cent.—On all sales or purchases of ships and other vessels, houses or lands, where no advance on them has been made, 2½; on all other sales, purchases, or shipments, 5; on goods consigned, and afterwards withdrawn, or sent to public auction, if no advance on them has

The mayor of Sydney has an annual salary of £800; and eleven other different officers of the corporation have salaries amounting, in the aggregate, to about £2,200. The repairing of the streets of the city costs about £8,000 a-year; the water-pipes and repairs of fountains, £2,200; the lighting, £700. The police of the capital, and of the colony generally, are paid out of the general revenues: the cost for 1848, was—city police, on land, £7,464; water ditto, £1,432; these charges are irrespective of the police in the interior, which cost, during the year 1848, within the settled districts, £21,229; mounted police, £9,177; native ditto, £227; showing a total annual charge for police in New South Wales of £39,529.

The census of March, 1846, gave the census of the city—males, 20,810; females, 17,548 = 38,358. The suburbs, at the same period, stood thus—Balmain, males, 682; females, 655: Camperdown, males, 125; females, 176: Canterbury, males, 128; females, 64: Chippendale, males, 219; females, 197: the Glebe, males, 538; females, 522: Newtown, males, 631; females, 584: O'Connellstown, males, 25; females, 15: Paddington, males, 422; females, 404: Redfern, males, 437; females, 428: St. Leonard's, males, 223; females, 189: Surry hills, males, 121; females, 86. Total in the suburbs, males, 3,546; females, 3,286 = 6,832. Thus, in March, 1846, the city and its environs contained 45,290 English, or English-descended inhabitants. It now [March, 1850] contains, probably, about 60,000 of the Anglo-Saxon race.

Sydney has a Chamber of Commerce, which is composed of the merchants, ship-owners, and others interested in the trade of the colony.* An *Australian Club* was instituted in the year 1838, and numbers about

been made, 2½; on giving orders for the provision of goods, 2½; on guaranteeing sales, bills, bonds, or other engagements, 2½; on the management of estates for others, 5; on procuring freight or charter on passage money, and on freight collected, 5; on insurances effected, ½; on settling losses, partial or general, 1; on effecting remittances, or purchasing, selling, or negotiating bills of exchange, 1; on the recovery of money, 2½; if by law or arbitration, 5; on collecting house rent, 5; on attending the delivery on contract goods, 2; on becoming security for contracts, 5; on ships' disbursements, 5; on obtaining money on respondentia, 2; on letters of credit granted, 2½; on purchasing, selling, receiving from any of the public offices, lodging in ditto, delivering up, or exchanging government paper, or other public securities, ½; on all items, on the debit or credit side of an account on which a commission of 5 per cent. has not been previously charged in the same account, including government paper, 1; on entering and clearing ships at the custom house, each 1 guinea.

Warehouse rent.—On all measurement goods, 1s. per ton of 40 cubic feet per week; on liquids, 1s. 1d. per tun of 253

300 members. The club-house, which has cost nearly £10,000, contains good accommodation; the entrance fee is £30; the annual subscription, £7 10s. The society met with at the Australian Club is, in point of good breeding and general intelligence, quite on a par with the generality of London clubs, and the rules by which it is governed equally stringent, not to say exclusive. There is, indeed, excellent society in Sydney for the most punctilious gentleman; he may choose his acquaintance from the thirty-six members of the Legislative Council, the bishop, archdeacon, and other clergy; the three judges; law officers of the crown; the officers of the troops stationed in the colony; the members of the government; the magistracy; numerous members of the medical and legal professions; and landed proprietors, and mercantile men of all grades. At the balls and assemblies in the capital, the beauty and elegance of the Australian belles is a theme of general admiration; and many a born Englishwoman finds herself eclipsed by the fair face, fine form, and witching graces of the "currency lasses."*

Sydney has its *omnibi* as well as London; they ply constantly between Paddington, on the South Head road, and the Star hotel, George-street, and between other parts of the city; hackney-carriages and cabs are also numerous.

There are several well-appointed four-horse coaches, such as could not now be found in England, plying between Sydney and Paramatta, Windsor, Richmond, Liverpool, and other towns in the interior. There is also a regular stage conveyance to Melbourne, Port Phillip. The several mail-coaches for the western and southern districts leave the post-office, Sydney, every afternoon (Sundays excepted), at five o'clock. The *Age*, *Australian*, and *Water-witch* four-horse coaches leave Sydney daily (*Sundays excepted*), for Windsor and Paramatta.

Fast and commodious steam-boats ply daily, morning and evening, between Sydney and Paramatta; and there is constant steam communication with Hunter's River, Port Stephens, Port Macquarie, and also with

gallons (old measure), per week; on sugar, rice, salt, and similar articles, 6d. per ton per week; on grain, 4d. per bushel for first month, and one half-penny per bushel, per week afterwards; on iron, lead, &c., 4d. per ton per week.

The following are the premiums charged by the Australian Marine Assurance Company for insuring vessels and merchandize:—

Per cent.—Sperm fishery, for twelve months, 8 to 10 guineas; ditto, for the voyage, 8 to 14 guineas; Hobart Town, to or from, 1 guinea; Launceston, ditto, 1½; New

Melbourne, Port Phillip, Boydtown, and other rising places south of Port Jackson.

Some of the recorded statistics of Sydney indicate the state of the city. Thus, in 1844, there were "eighty-six licensed stage-coaches plying in Sydney; 186 licensed draymen; and twenty-four licensed porters. The total number of licensed slaughter-houses for the year was fourteen: there are about 130 licensed watermen plying within the boundaries of Sydney. The total number of dogs registered in Sydney is only 1,766: there is reason to believe, that the number prowling about the streets, without any ostensible owner, is upwards of 3,000." It is fortunate that hydrophobia is unknown in Australia.

The Sydney post-office has been, for the last quarter of a century, under the management of an able and zealous postmaster-general, James Raymond, Esq., who has carried into effect numerous improvements. The metropolis holds communication with four districts in the colony—the western, southern, northern, and coast districts. The *western*, in 1848, contained fourteen district post-offices, the most distant (Wellington) being 230 miles; and the second nearest (Paramatta) fifteen miles; the letter-charge to the latter is fourpence; to the former, tenpence. At Paramatta the delivery is twice daily; at six other places, daily: and, at the others, twice or thrice a-week. In the *southern* district there are thirty-five district post-offices; the nearest (Liverpool) is twenty miles, and the most distant (Belfast) 817 miles; the despatches are five daily, and the remainder twice and thrice a-week. The *northern* district has twenty-four post-offices, to each of which there is a daily, bi, or tri-weekly despatch. The *coast stations* have their post-office deliveries and despatches regulated by the steam-packets plying between them and Sydney. The number of letters despatched from Sydney post-office, in 1843, was 822,733; and the number of newspapers was 905,709. Compared with 1837, the number of letters had increased two-and-a-half-fold; and the newspapers three-and-a-half-fold. The post-office

Zealand and South Sea Islands, per month, 1; Manilla and China, to, 2½, from, 3; Madras, Bombay, and Calcutta, to or from, not including risk through Torres' Straits, 3; Mauritius, ditto, ditto, 2 to 4; Cape of Good Hope, ditto, ditto, 2½; United Kingdom, ditto, exclusive of war risk, 2½ to 3½; Rio de Janeiro and Bahia, ditto, ditto, 2½.

* For some years there were two denominations in the circulating medium, sterling and colonial currency; the European born obtained the name of *sterling*, and the colonial that of *currency*.

collections, at present, amount to about £15,000 a-year.

The distances, in English miles, of the different post towns in the colony, in 1848, from Sydney, are thus stated:—

Western District—Hyde, 8; Paramatta, 15; St. Mary, 29; Penrith, 33; Windsor, 34; Richmond, 39; Hartley, 78; Bathurst, 113; O'Connell, 125; Carwar, 144; Mudgee, 150; Molong, 163; Canowindra, 176; Wellington, 230.

Southern District—Liverpool, 20; Camden, 33; Appin, 43; Picton, 46; Wollongong, 64; Dupto, 72; Berrima, 81; Kiama, 88; Shoalhaven, 103; Marulan, 108; Bungonia, 117; Huskisson, 121; Goulburn, 125; Gunning, 152; Bungendore, 161; Ulladulla, 163; Braidwood, 164; Yass, 117; Queanbeyan, 182; Broulee, 209; Gundagai, 244; Ovens, 429; Seymour, 528; Kilmour, 549; Melbourne, 587; Ballan, 637; Geelong, 641; Grange, 773; Belfast, 817.

Northern District—Patterson, 10; Carrington, 16; Clarencetown, by water, 24; Gresford, by water, 25; Wollombi, by water, 27; Singleton, by water, 31; Dungog, by water, 45; Jerry's Planes, by water, 46; Muswellbrook, by water, 59; Merton, by water, 66; Scone, by water, 75; Murrurundi, by water, 99; Cassilis, by water, 125; Armadale, by water, 150; Tamworth, by water, 154. The distance of the other post towns by water to the north and south of Sydney, is not laid down. Since 1848 several other post towns have been added to the above list.

There are no railroads as yet in New South Wales, but it is probable that ere long tram roads at least will be made. The iron and other hard woods of Australia would serve in the first instance instead of iron rails; by this means roads might be made round the head of Botany Bay, through the valleys to the southward, through the rich Maneroo country, and towards Illawarra. Another trunk line would lead to the north-western regions. Sooner or later New South Wales, Port Phillip, South Australia, and subsequently Western Australia, will be connected by railroads, for the colonists have plenty of iron, coal, and wood, for their construction, and the want of navigable rivers will necessitate the adoption of this mode of locomotion. Mr. Woore has set forth a project for a railway to connect Windsor, Penrith, Ellerslie, Vermont, the Oaks, Bong-Bong, and Goulburn with Sydney. The main line from Sydney to Goulburn, is 122 miles; the Windsor branch, 13½

miles; Ellerslie branch, 10½ miles; Penrith branch, 8½ miles = 154½ miles.

Whereas the distances from Sydney by the present lines of road are—to Paramatta, 14; Windsor, 39; Penrith, 33; Goulburn, 125; Bong Bong, 80; Camden, 39. Of these 154½ miles of railway, fifty-four miles run through government land, and 102½ miles through private property. Twenty miles is already cleared of timber, and 134½ miles to be cleared. Supposing the line to be three chains wide, or 198 feet, and 154½ miles long, it would contain 3,708 acres, 2,460 of which would be through private property, and 1,248 acres through government property. In the course of the line, with the exception of the Windsor branch, there are, besides the formation of the road, eight deep cuttings, and seven side cuttings. The erections are, five termini, seven stations, two brick or stone viaducts, ten second-class wooden viaducts, eight first-class bridges, twenty-three second-class bridges, eighty-three third-class bridges, seventy-four culverts, and about eight accommodation bridges.

By means of wooden instead of iron rails, the wheels of the locomotives "bite" closer, and steeper gradients may be ascended. The estimated cost of this line, with wooden rails, is £419,403, or only £2,714 per mile. Of this sum 275,000 sleepers, nine feet long, (rough square,) being for two lines on 154½ miles, each six feet from centre to centre, five shillings each, cost £68,000; making 154 miles of road cost £300 per mile = £46,200; eight cuttings, £16,000; seven-side ditto, £10,500; building bridges, culverts, stations, termini, draining, &c., about £120,000; laying sleepers and rails, £200 per mile, £30,900; 3,270,000 feet of scantling, 8 × 4, at twelve shillings per 100 = £19,620; locomotives, carriages, turn-tables, &c., £50,000. These details give some idea of the difference of cost between a railway in the United Kingdom and one in Australia. At Sydney excellent steam-engines are made; the carriages and everything required would be prepared in the colony.

Having, in the previous pages, carefully gathered together—even at the risk of offering what some may consider dry detail—the materials from which my readers may, I trust, be enabled to form a correct idea of this fair and youthful city, I may conclude with a few general remarks. My own feelings, on first landing, from the east coast of Africa,

were those of mingled delight and astonishment. I was not prepared to find, at the antipodes, a city so home-like, so thoroughly English in its character; nor could I have believed it possible that a colony of such comparatively recent establishment, founded too under very peculiar circumstances, could have acquired a degree of order, comfort, cleanliness, and security, not inferior to that which distinguishes some of the best and oldest cities of the mother country. Lest, however, it should be supposed that a bias in favour of this colony, or of the British colonies generally, influences (even unconsciously) my pen, in writing of them, I prefer quoting, as far as practicable, the statements of other writers, and citing the impressions produced on the minds of other travellers, instead of merely offering my own opinions.

Count Strzelecki, writing in 1839, says:—"Since my arrival in Sydney, I cannot help asking myself—Am I really in the capital of that 'Botany Bay,' which has been represented as 'the community of felons'—'the most demoralized colony known'? &c. &c. Let the authors of these and other epithets contained in the works they wrote on New South Wales congratulate themselves! My mystification was complete. The evening I effected my disembarkation in Sydney, I did it with all imaginary precautions, leaving my watch and purse behind me, and arming myself with a stick. I found, however, in the streets of Sydney, a decency and a quiet which I had never witnessed in any other of the ports of the United Kingdom. No drunkenness, no sailors' quarrels, &c., &c. Since then, how many nights like the first did I not witness, in which the silence, the feeling of perfect security, and the delicious freshness of the air, mingled with nothing that could break the charm of a solitary walk!"

Captain Stokes, R.N., of H.M.S. *Beagle*, who visited Sydney in 1840-1, says he was much struck with the strange contrast its extensive and at the same time youthful appearance presented, compared with the decrepid and decaying aspect of the cities in South America, which he had recently quitted, and which were founded two centuries ago, by a nation at that time almost supreme in Europe, upon the shores of a fertile continent. In Sydney he beheld with wonder what scarce half a century had sufficed to effect; for, "where, almost within the memory of man, the savage ranged the desert wastes and trackless forests, a noble

city has sprung, as though by magic, from the ground, which will ever serve both as a monument of English enterprise and as a beacon from whence the light of Christian civilization shall spread through the dark and gloomy recesses of ignorance and guilt."—(Vol. i. pp. 244-5.)

Mr. C. I. Baker, who recently visited Australia, describes very naturally the impression made upon strangers from the United Kingdom by the Australian metropolis. "Sydney is certainly an extraordinary place; and if the colony continues to progress as it has done during the last twenty or thirty years, it will, ere another generation have passed away, be one of the first cities in the world. A new-comer rubs his eyes, and repeatedly questions whether his long voyage has not been a dream, and he himself still in the mother country: the streets, the houses, the shops and other buildings, the carriages, including stage coaches, flies, and cabs, are all constructed as in England; the bustling busy population are all English or thoroughly Anglified; so also are the various customs of life, the goods displayed in the shops, the furniture, the grates with their coal fires, the style of living and mode of cooking, the wine, beer, &c.;—in short, from first to last, you have England, and England only."*

In another place, Mr. Baker bears the following testimony to the character of the people. It is after adverting to there being one, or sometimes two of her Majesty's regiments stationed at Sydney, and a great many sailors from all parts of the world frequenting the port, he adds—"Yet it is one of the most orderly towns a traveller can visit. I witnessed neither the brawl nor drunkenness, nor the shameless prostitution which so often shock and offend in our own streets; whilst the only beggars I met with were two blind men. Another proof of the prevalent order of the town is the general decorum observed on the sabbath. On the whole, great credit is due to the authorities for their excellent government of a population, amongst whom might be expected much disorder and unseemly immorality."—(pp. 132, 133.)

No government could, however, preserve the order and decency so manifest in Sydney, unless seconded by a strong sense of propriety in the inhabitants themselves, who attach great importance to the obtaining and maintenance of a good character

* *Sydney and Melbourne*. 1 vol. 1845.

and a fair fame;* and Mr. Baker speaks of having been struck by "the superior breeding, education, and intelligence of many of the settlers not locating in fellowship in any particular neighbourhood, but amply scattered throughout the colony—men, moreover, of unblemished character, active in mind and body, and of agreeable and open manners."

PARAMATTA, the second town in the county of Cumberland, was established, as we have already seen (p. 403), in the very early days of the colony. For a considerable time it was merely an *encampment*, or succession of huts, and the older settlers continued to speak of it as *the camp*, long after it had grown to be a village, and even a town. The name of Rose Hill, given by its first European inhabitants, has been happily superseded by the native designation of the river on which it is situated. The *river* is, however, chiefly a continuation of Port Jackson, its waters being salt until just beyond Paramatta bridge, where a dam thrown across by governor Macquarie, checks the further advance of the tide. The commissariat store, a large brick building, occupies a position at the extremity of the town, close to the beach, permitting boats to go alongside and have their cargoes hoisted up into its capacious granaries; while beyond this is a water-mill—a dam being here carried across, to keep up the necessary supply to work it.

The town extends over a considerable extent of ground, and is built along a small fresh-water stream, which falls into Paramatta river. The streets are regularly laid

* The diminution of crime of late years in Sydney, and throughout the whole territory of New South Wales, is very remarkable, and will be found detailed under the section on *Crime*, but it may be useful to give here a statement of the number of felonies in the colony for ten years—showing their number in proportion to the population, and to each 10,000 inhabitants; thus:—

Years.	One in each	To each 10,000 Inhabitants.
1839	148	67
1840	196	51
1841	208	48
1842	276	36
1843	294	34
1844	327	31
1845	362	27
1846	358	28
1847	449	22
1848	481	21

This shews an actual decrease of more than *forty per cent.*, and a relative decrease of crime of more than *sixty-eight per cent.* in ten years.

out—the principal of them, George Street, is about a mile in length; the houses, which are generally detached from each other, and partly surrounded with gardens, are mostly built of brick or white freestone—the latter being very abundant, and, from its excellent quality, much used for grindstones. The public buildings are substantial and well constructed. The government-house is agreeably situated on an eminence, in a somewhat extensive demesne, amid carefully tended gardens; Sir Thomas Brisbane, who made it his chief residence during his administration, erected an observatory, which he placed under the superintendence of a skilful astronomer, named Dunlop. There is an excellent institution for orphans, situate on the banks of the river. In the vicinity of Paramatta is a Convict Lunatic Asylum, which contained on 31st December, 1848, eighty-eight male, and ten female invalids; 104 male, and twenty-four female lunatics; to these are attached, as servants, ten male and one female convict. The town lies in a sheltered valley, and its climate, during the winter months, is delightful; but in the summer the heat is sometimes intense, the difference of temperature between it and Sydney being generally as much as from six to ten degrees.

Paramatta is a corporate town, having a municipal district council; the annual income is about £1,200, consisting chiefly of tolls. The cloth manufactured here has obtained a high character, not only in the colony, but also in the mother country; and a soft woollen fabric called "Paramatta," has become equally celebrated, being (I am told) now deemed by the ladies as indispensable an article in their mourning attire, as bombazeen was, in that of their grandmothers. Several other manufactories have been recently established in the neighbourhood. A recent writer says, that "a silk institution has been formed there, under able management, and mulberry planting on a large scale has been commenced;"† and in the same work it is elsewhere stated, that extensive works for the smelting of copper ore are in operation at Lane Cove, on the Paramatta river. There are large salt works on the banks of the Paramatta river.

Paramatta, being the high road to Windsor and the northern districts, has numerous and commodious inns. It is much frequented by visitors from Sydney. The country in

† *New South Wales*, by a resident of twelve years' experience. 1849.

its immediate vicinity is very pleasing, extensive orangeries thrive luxuriantly, and in many places the land is well cultivated.

The distance between Sydney and Paramatta is about eighteen miles by water, and fifteen by land. Steam-boats run morning and evening between the two towns, and carry a great number of passengers. The trip by water is a delightful one; for, after leaving Sydney, a considerable portion of the interior of Port Jackson is traversed before entering the river, which forms some reaches, whose beauty must be acknowledged even by those who have but just before gazed upon the "harbour of an hundred coves." By land it is much less agreeable, the soil being generally of inferior quality, and the scenery very monotonous, notwithstanding the various dwellings, from the mansion and its spacious pleasure-grounds, to the cottage with its neat garden, and the only too numerous public-houses, which at intervals, on either side, indicate the vicinity of a thriving town. The old-established family of Blaxland have a fine estate on the road between Paramatta and Sydney; and the large mansion and excellent farm of the late D'Arcy Wentworth is on the same line. Farms are also being formed along the Paramatta stream; and a village is springing up on a pretty turn of the river called Kissing Point.

From the portion of Paramatta situated beyond the river, a good road runs for some distance along the right bank of the stream, in a north-west direction, which leads to *Windsor*, the distance being about twenty miles. This town, formerly called the Green Hills, at present containing about 2,000 inhabitants, is situate near the confluence of the South Creek with the Hawkesbury, which at this point is 140 miles distant from the sea, and navigable for vessels of 100 tons burthen, four miles above Windsor. The town is very pleasantly situated, being built on a hill elevated 100 feet above the level of the Hawkesbury, and commanding a beautiful view of the surrounding country; its population and buildings are similar to those of Paramatta. The inns, as is the case, indeed, throughout the colony, are large and excellent; stage-coaches ply every day to and from Sydney *via* Paramatta, and steam-boats thrice a week, the distance between Broken Bay, where the Hawkesbury disembogues into the sea, and the north head of Port Jackson, being about fourteen miles. The land in the vicinity of Windsor

is extremely rich, and being in the possession of numerous small farmers, is carefully tilled, so that frequent farm-yards and extensive fields of grain, with herds of kine, add to the natural beauty of a very picturesque country. In some parts the broad and placid waters of the Hawkesbury are overhung by cliffs 600 feet in height, and the numerous vessels and boats on this noble stream form another attractive feature, and render it a favourite resort.

The town of *Wilberforce* lies on the opposite side of the Hawkesbury, obliquely to the right; and obliquely to the left is—

Richmond, a rising inland town, distant from Sydney thirty-nine miles.

Liverpool is situate on the banks of the George River, which disembogues in Botany Bay. Many persons, long accustomed to the term of "Botany Bay," believe that the colony is founded on the shores of this extensive inlet of the ocean. I have already stated, that such was the original intention, but it was never carried into effect; and the shores around Botany Bay are nearly as wild, as bleak, as barren, and almost as uninhabited, as when they were first visited by captain Cook and Sir Joseph Banks. Botany Bay is about fourteen miles to the southward of the Heads, as the entrance of Port Jackson is called; it is wide, open and unsheltered for vessels. I visited it, not liking to leave the country without having seen this famous spot. The only advantage derived from my journey, was the opportunity of contrasting the dreary desolation around its shores, with the busy hum of human industry at the contiguous harbour of Port Jackson, and of being reminded that about half a century ago, there was no difference in the wild waste of nature at either place. The country is flat around, but cleared and cultivated, though the soil is poor; the public buildings are the same as in the towns previously described, with the addition of a Male Orphan School. The Church is a good structure, but insufficient for the wants of the town. The Hospital is a handsome building, well adapted for the benevolent purpose of contributing to the relief of the population for miles around. Three miles beyond Liverpool is Lansdowne bridge, which is built of stone (by convict labour); the arch being of 110 feet span. There are stage-coaches daily between Liverpool and Sydney. It now contains about 5,000 inhabitants, and is yearly increasing in size and opulence.

A new town called *Canterbury* has been commenced, six miles from Sydney, where extensive works have been constructed for refining sugar.

Other towns and villages (see chapter on population), viz.: — *Campbelltown*, *Appin*, *Penrith*, *Pitt-town*, *Petersham*, *Narellan*, &c., are arising in different directions; each with its church, gaol, court-house, market, mill, and numerous spirit and general stores; and as population increases, they will augment in number and in extent. The post-roads throughout the county of Cumberland are numerous, regularly cut and levelled, well made, and kept in good macadamized order, by means of the tolls from turnpikes erected near the entrance of each town. The great thoroughfares have four railed fences at each side of the road, and mile-stones throughout. There are many cross-roads, some still in the original bush state, and known only by notched trees and a cart-rut.

Previous to quitting the county of Cumberland, it may be mentioned, that the road through the *northern* part, towards Wiseman's Ferry, to the Blue Mountains, has been made by following one continuous ridge of sandstone; but the *western* route, by Paramatta, is free from precipitous ravines, and the undulations sufficiently moderate, to admit the passage of a straight road; the soil also is good, consisting chiefly of decomposed trap, and producing crops as abundantly now, as when it was first tilled, forty years ago. In the neighbourhood are the hospitable mansions of the Lawsons, Lethbridges,* and other much respected settlers, who, in the early days of the colony, emigrated to New South Wales, and have contributed materially to the improvement of the land of their adoption.

CAMDEN COUNTY is divided from the county of Cumberland by a line bearing W. 20° W. from Bulli, on the sea-coast, to the head of the Cataract river, thence by that river and the Nepean to its junction with the Wollondilly, there called the Warragamba; on the west by the river Wollondilly to the junction of Uringalla creek, and by the Uringalla and Barber's creek to the Shoalhaven river; on the south by the Shoalhaven river, which separates it from the county of St. Vincent; and on the east by the ocean. The extreme length of Camden county is about sixty-six miles, and the extreme breadth fifty-five miles. Its surface is, in general, a continued succession of hill

and dale, the former sometimes rising into mountains, whose steep sides are clothed with varieties of lofty timber. There is some scenery in this county of a peculiarly wild and gloomy character. A remarkable range, consisting chiefly of trap rock, traverses the whole county, between the Wollondilly and the sea, in a south-east direction, extending from Bulli to a small boat harbour named Kiama; the highest part is known as the Mittagong range. Although so much of this county is mountainous, and a large portion of its area consists of ferruginous sandstone, it yet contains an unusual proportion of excellent grazing land, and also much good wheat land, especially towards the side of the Shoalhaven river. The Razor-back range is another remarkable feature in this part of the country. It is isolated, extending about eight miles, in a general direction, between W.N.W. and E.S.E., being very level on some parts of the summit, and so very narrow in others, while the sides are also so steep, that the name it has obtained is descriptive enough. Around this trap range lies the fertile district of the Cow Pastures, which are said to comprise about 60,000 acres, the greatest part consisting of a light, sandy loam, resting on a substratum of clay. These pastures extend northward from the river Bargo to the junction of the Warragamba and Nepean rivers; they obtained their name from the large number of cattle found there, which had for their original stock three runaways, belonging to the herd landed from H.M.S. *Sirius*, soon after the founding of the colony. Barragorang, in this county, is a long narrow valley, hemmed in between a continuous ridge and the Blue Mountains, with only one pass into it, and that a very precipitous one. It runs north and south along the banks of the Warragamba, and consists of a stripe of rich soil, matted with the finest native herbage, and most picturesquely variegated with rocky and precipitous mountains, frowningly impending on either side, their rugged declivities occasionally adorned with waving shrubs and verdant heaths. But the most interesting portion of Camden county is the Illawarra, a narrow stripe of arable land, situated between the ocean and the eastern base of a lofty ridge of trap rock, running parallel to the coast, and connected with Mittagong range. The average breadth of this belt of land is from four to six miles, and its length about sixty. This singular region is termed

by the colonists the garden of New South Wales; Mitchell, Lang, Cunningham, Stokes, and other writers, speak in the most enthusiastic terms of its surpassing beauty. The charms peculiar to mountain scenery of the wildest and most romantic order, and those also which characterize more particularly the shores of a mighty ocean, are each enhanced by the rich luxuriance of tropical vegetation, while birds of exquisite form and brilliant plumage take their flight through the clear, exhilarating "Australian" air. The stately palms, the graceful tree-ferns, and the lofty cedars, entwined to their very summits by parasitical plants of various kinds, which, stretching from tree to tree, form a sort of embowered roof, afford a perfect refuge from the sun's too fervid rays, and overshadow a rich and varied undergrowth of wild vines and matted creepers. No pestilential vapour, no deadly miasm lies in wait to poison, with insidious influence, the unwary loiterer. In Eastern Africa (at Zanzibar), Madagascar, and Java, I have looked upon regions (in many respects resembling this) which seemed, at first sight, to realize the idea of Eden; but painful experience soon teaches a European, that to him these fair scenes are fraught with disease and death; and the contemplation of them inspired me with much the same feeling with which a man would regard the mask, whose painted beauty served as a temporary cover to loathsome deformity.

It is difficult to account for the tropical character and extraordinarily luxuriant vegetation of Illawarra. It may be in some degree attributable to the shelter afforded by the adjacent mountains from the cold winter winds, the nourishment obtained from the streams which flow from those heights, and the moist breezes of the sea; but I am inclined to think with Dr. Lang, that the chief cause may be traced in the soil, which exhibits many indications of a volcanic origin. In some parts of the district of Illawarra, or Five Islands, (as it is sometimes called, from some rocky islets which lie near the coast,) there are grassy meadows, of fifty to a hundred acres in extent, quite destitute of timber, and surrounded with a border of the lofty fan-palm, or cabbage-tree. Dr. Lang states, that several extensive tracts are in the hands of non-resident proprietors, a circumstance (he adds) always to be regretted wherever it occurs in the colony; but its resident

inhabitants consist chiefly of small settlers, who cultivate grain, potatoes, pumpkins, &c., for the Sydney market, their produce being conveyed to the capital by water, in small coasting vessels. The cedar-tree, both white and red, abounds in the mountains of this district and in the deep gulleys; and the cutting and conveying to Sydney affords employment to a considerable population, somewhat similar, both in habit and character, to the lumberers of Canada. The cedar of New South Wales is used all over the colony for all sorts of cabinet and joinery work; it is somewhat similar, in appearance, to Honduras mahogany, and the choicer specimens take a fine polish. Its price depends on the number of buildings going on in the colony at any particular time; but it is generally sold at twopence to threepence per superficial foot of one inch in thickness. Illawarra is rendered very difficult of access by the numerous ravines in the range which forms its western boundary, to whose summit, on the interior side, sandstone extends. Half-way down Illawarra mountain (the height of which is estimated by Dr. Lang at from 1,500 to 2,000 feet high, and whose descent to the beautiful Illawarra country is the most precipitous and rugged bridle road, used in the colony for a road), is a singular place of refuge, so capacious as to have received three horses and their riders, formed by a dead tree of immense size, the interior of which has been consumed by fire, although it is still about 100 feet in height.* About nine miles from the foot of the mountain is the thriving little village of *Wollongong*, situated on a small harbour on the coast.

Berrima, the county town of Camden, is eighty miles from Sydney, and is situated in a hollow, on the Berrima river. It is 2,096 feet above the level of the sea, and the climate is sensibly different from that of the low country towards the coast. The gooseberry and currant thrive and attain a good size and flavour on this table-land; while the potato and the apple acquire an European character; but the maize and the orange, which succeed well below, refuse to grow in this higher region. The children also, at Berrima, have fine ruddy faces, as at home; unlike the pale faces of Sydney and the lower country generally. (Lang's *Phillipsland*, p. 238.)

The country immediately round Berrima is of but indifferent quality, though at the

* Lang's *New South Wales*.

distance of a few miles it becomes of a much better description; one chief inducement in the choice of this locality having been its abundant supply of good water, materials for building, and the vicinity of a small agricultural population. The church, court-house, and gaol are handsome buildings; and at the entrance of the township is a substantial bridge of stone-work.

Camden, the estate of the Messrs. Macarthur, is a remarkable place; it extends for many miles along the bank of the Cowpasture river (on the Camden side), and exhibits striking proofs of the enterprising spirit of its proprietors. The best kinds of grape, from the Rhine, Madeira, and other vine-growing countries, have been imported by these gentlemen, who have also brought out several German families, at their own cost, for the purpose of introducing the best mode of cultivating the grape and preparing wine.* These laudable efforts appear likely to prove very successful; and the Messrs. Macarthur will rank, as promoters of production and manufacture in their native land, second only to their worthy father. Their farming is pursued on an excellent system, and is very productive. Silos, or subterranean granaries, have been constructed at Camden; and Mr. Atkinson mentions one (filled with maize and millet) being opened there, after the expiration of six months, and a great part of the grain taken out, which proved to be in a state of perfect preservation, and the straw lining quite sound and dry, except a little near to the under surface of the brick arch.†

Towns not before mentioned.—Wilson, Picton, Kiama, and Murrionbah. *Rivers*.—Wingecarribee, a fine freshwater stream, rising in a swamp of that name, and flowing through Berrima, which empties itself into the Wollondilly; the Nattai, which flows into the Wollondilly at Barragorang; the Kangaroo, Avon, Cataract, Bargo, and

Minumurra. *Creeks*.—Myrtle, Werriberri, Wollondoola, Black Bob, Yarringal, Broger's, Broughton's, Mullet, and Wattle. *Eminences*.—Jellorr, Bonnum Peak, Keera Bonnum, Keera, Bullio, Kembla, Nundialla, and Pianeng, several of which command extensive and magnificent prospects.

ARGYLE COUNTY is bounded on the north by the river Guinecor, from its junction with the Wollondilly, to its source near the Burra Burra lagoon on the dividing range; on the west, by the dividing range from Burra Burra, by Cullarin to Lake George, including the three Breadalbane Plains; on the south by the northern margin of Lake George to Kenny's Station; from Lake George to the Alianoyonyiga mountain, by a small gully, descending to the lake; from Alianoyonyiga, by the ridge extending south-east, to the hill of Wollowolar; and from Wollowolar by the Boro creek, to the Shoalhaven river, to the junction of the rivulet from Barber's creek; by the rivulet, from Barber's creek to its source; across a narrow neck of land to the head of the Uringalla creek; by the Uringalla creek to its junction with the Wollondilly river; and by the Wollondilly to the junction of the Guinecor above-mentioned; the nearest point to the sea being distant about twenty-five miles. Argyle is about sixty miles in length, its average being from twenty-five to thirty miles. The surface is generally undulating, consisting of tolerably high and extensive ridges, ramifying in various directions, with swelling hills and irregular plains and vallies between them, watered by the Wollondilly and other branches of the Hawkesbury and Shoalhaven rivers, besides a number of small rivulets and ponds containing water all the year round.

Argyle contains large tracts of open forest, where the basis of the soil is granite, and the country, though pleasing to the eye, from its park-like appearance, is poor, and seldom adapted for cultivation; but the soil is light, dry, and extremely well-suited for sheep-grazing, the surface being covered with a thin but very nutritive herbage. In other parts, however, whinstone predominates, and the land is of the best quality, being equally well fitted for either pastoral or agricultural purposes. Sir Thomas Mitchell speaks of the *anthistiria* or oat-grass, which grows in these tracts, as the best of any Australian grass for cattle, and one of the surest indications of a good soil and dry situation. Argyle is rich in minerals; cop-

* The first cultivators of the vineyard of the Messrs. Macarthur were some piratical Greeks, sent out as convicts, who, at the expiration of their sentences, returned to their own country.

† The construction of silos in those countries (*i. e.*, Hungary, Poland, &c.) where they are in common use, is exceedingly simple. An elevated site is fixed upon (if possible, the pinnacle of a small mount), so that there can be no drainage of water into the granary from higher ground in its vicinity. A pit is there sunk, resembling an inverted lime-kiln; the depth and dimensions of this pit must depend upon the quantity it is required to contain, which may be 200 or 2,000 bushels. (See Atkinson's *Account of Agriculture and Grazing in New South Wales*, p. 75.)

per of the best ore is found near Arthursleigh, and other places. A description of marble is found there, which is said to resemble the famous Giallo Antico, of Italy. Near the Wollondilly, a few miles from Towrang, is a quarry of crystalline variegated marble, which has of late years been wrought to a considerable extent for chimney-pieces, tables, and other ornamental purposes.

Goulbourn, or *Mulwarree*, the county town of Argyle, distant 120 miles from Sydney, is situated in a fine tract of country, fifteen miles in length, with an average breadth of eight miles, called Goulbourn Plains, and is in the centre of an extensive pastoral and agricultural district. Dr. Lang deems it, beyond comparison, the finest town in the interior of New South Wales, and says that the buildings generally are of a much more substantial character, as well as of a much finer appearance, than those of most inland colonial towns. It is a busy and thriving place, and annually increasing in prosperity; the proposed communication by a railway with Sydney, if carried into effect, will add to the importance of the place. There is an extensive flour-mill, with a fourteen horse power steam-engine; a brewery, also carrying a steam-engine; and the inns are stated to be "quite splendid for the interior of a colony." The amount of business done in these establishments is indicated by the fact, that Mr. Bradley, their proprietor, pays £700 a year for carriage between Goulbourn and Sydney. The members of the church of England, Presbyterian, and Roman Catholic persuasions have each a neat temple devoted to their respective forms of worship. The Goulbourn, or Mulwarree Plains are supposed to have been, at no very distant period of time, the bed of a lake; the stones which are collected in particular spots, or which are dug up from excavations made to a great depth, consist of quartz, pebbles, rolled stones, and shingle, as if from the bed of a beach; the ridges at either side are like headlands. The Goulbourn Plains form part of a series of alluvial tracts which traverse the eastern part of the colony, and have an average elevation of about 2,000 feet above the level of the sea; the Goulbourn and Breadalbane Plains are in the south; the Bathurst, in the west; and the Darling Downs, which have a length of 120 miles, with a breadth of thirty to forty miles, are in the north.

The Breadalbane Plains are separated from those of Goulbourn by a ridge of forest land about eight miles across. The plains are situated on the high dividing ground, or waters hid between the waters falling eastward and westward. They have, probably, once been lagoons, of which there are several in the vicinity, viz.—Tarrago, Mutmutbelly, and Wallagorang; the latter is supposed to be the residuum of a lake which probably once covered the Breadalbane plains. In several parts there are what the Americans aptly, but not elegantly, term "salt-licks," on which the cattle depasture with great avidity, and with much benefit. There is a fine tract of pastoral country around these plains, at an elevation of 2,278 feet above the level of the sea. The pasturage has a rich velvet-like appearance. The three open flats or plains are circumscribed by some low hills; they extend for about twelve miles in the direction of the Sydney road, and have an average breadth of two miles.

Lake Bathurst, in this county, about 130 miles south-west of Sydney, and sixty miles inland, from Jervis Bay, is from three to five miles in diameter, and varies in size according to the quantity of water it receives from the torrents on the north-west and south-west—of which it forms the reservoir. The waters are pure—the depth I have not been able to ascertain. Mr. Peter Cunningham speaks of an animal resembling a seal, having been seen in this lake, apparently three feet long, and every now and then appearing above water to "blow." The aborigines call it "Devil-devil," and consider it an evil spirit.

Marulan, the second town in the county, is situated at the junction of the roads leading to Goulbourn and Bungonia, which latter town stands on a creek of the same name.

Rivers.—Wollondilly, Cookbundoon, Shoalhaven, and Guinecor. *Creeks*.—Windellama, Curran, Bangalore, Lerida, Crisps, Mulwarree Ponds, Woorondooronbidge, Kerrowong, Myrtle, and Uringalla. *Eminences*.—Wayo, Mount Fitton, Towrang, Marulan, Mount Macalister, and Mount Hobbes.

ST. VINCENT COUNTY extends along the sea-shore to the southward of Camden county, and includes the harbours of Shoalhaven, Jervis bay, and Bateman bay, already described, and is the general coast line of the colony. It is bounded on the north and west, by the Shoalhaven river; and on the south, by Moodong creek, Deua river, and Moruya river. Its length is about eighty-four miles,

and its breadth about forty miles. The greater, and especially the northern portion of this county, is very wild and mountainous; and will probably afford a rich field for geological and mineralogical research.* The southern portion affords the most soil available for cultivation or pasture; although, on Bateman bay, which is its limit on the south, much good soil cannot be expected, as Snapper Island, at the entrance, consists of grey compact quartz only, with white veins of crystalline quartz. On the upper part of the Shoalhaven river, there are many plains admirably adapted for agricultural purposes, the river there resembling an English stream, and flowing nearly on a level with the surface. The county is well watered by several small streams, of which the most considerable, called the Clyde, runs nearly parallel to the sea for a considerable distance.

Towns.—Braidwood is the chief; the others are Huskisson, Ulladulla, Broulee, Marlow, Narriga, Tianjara, and Farnham. *Rivers.*—Shoalhaven, Macleay, Clyde, Deuca, Mongarloo, Moruya, and Crookhaven. *Creeks.*—Wandagandria, Jervis, Yerrimong, Pigeon-house, Endrick, Jembaicambene, Congola, and Groobyar. *Eminences.*—Pigeon-house, Currockbilly, Budawang, Womballoway, and Jillamatong.

South and south-west of St. Vincent county there has been recently marked out the counties of Dampier, Beresford, Auckland, Wellesley, Wallace, Cowley, and Buccleuch; but of the boundaries and characteristics of these counties we have as yet little precise information, excepting Auckland, which is described by Mr. Wells† as comprehending that portion of New South Wales, bounded by a line running from Cape Howe along the boundary of the district of Port Phillip, to the point where the said boundary crosses the 149th degree of E. long.; thence due north along the said 149th degree of E. long. to the lat. of 36° 40' S.; thence due east to the sea, and thence south along the sea coast to Cape Howe. It is about sixty miles in length, and forty in breadth. It contains the secure

* My own opinion is, that gold will eventually be found there.

† *Geographical Dictionary or Gazetteer of the Australian Colonies.* By W. H. Wells. Sydney, 1848. This useful work, which I have but just procured, appears an admirable compilation of facts, collected with great care, and which, judging from the difficulty I have experienced in obtaining correct local information, must have been greatly needed.

haven of Twofold bay, on the south shore of which is situated the rising settlement of Boydtown. This thriving township owes its establishment chiefly to Mr. Benjamin Boyd, one of the most enterprising colonists in Australia, who, with his brother, Mark Boyd, of London, has very materially contributed to advance the interests of the colony, and to popularize New South Wales in England. There are two townships, named East Boyd and Eden, separated from each other by the river Kiah or Towamba. Point Brierly, about one mile from each township, is in 37° 6' 40" S., 149° 57' 42" east of Greenwich. Twofold bay is the chief port of outlet for the south-east districts of New South Wales, and is the key to the extensive Maneroo country, now divided into the several counties above named. Lieutenant Woore, R.N., who made the survey for the Admiralty chart, says that South bay, or that on the shores of which East Boyd stands, has a decided superiority over any other anchorage in Twofold bay, arising from the prevailing and strong winds blowing from the southward. It is more extensive than North bay, where Eden is, and possesses abundance of fresh water, which gives it a further advantage.

Boydtown, under the zealous exertions of its founder, already contains a neat Gothic church, the spire of which is visible twenty miles at sea, a handsome hotel, in the Elizabethan style, ranges of commodious brick stores, well-built houses, and neat verandah cottages; a jetty of several hundred feet in length, and a heaving-down hulk. There is an excellent whaling station, also extensive boiling-down and salt-provision establishments, &c. A light-house, now erecting on the South head, at the entrance of the bay, consists of a tower seventy-six feet in height, with a diameter of twenty-two feet. It is being built of white Sydney sandstone, in solid blocks of nearly half a ton each, and, independent of its light, will prove an excellent land-mark for the shipping which frequently take shelter in the bay, where they can procure, at East Boyd, abundance of provisions, fuel, and water. The produce exported already amounts, in value, to nearly £100,000 a-year. Mr. Benjamin Boyd has, after considerable labour, and at his own cost, constructed a road of forty-five miles, to convey the produce to Boydtown, from the famous squatting district known as the Maneroo plains, or Brisbane downs. The fine sheep-walks of

Maneroo, which occupy a square of about 100 miles in extent, and are from 2,000 to 3,000 feet above the level of the sea, on the right bank of the river Murrumbidgee, lie to the eastward of the meridian of 149° , and extend upwards of forty miles to the southward of the parallel of $36^{\circ} 15'$, which appears to be the parallel of their northern skirts. They are bounded on the east by the coast-range of hills, which give an interior or westerly direction to the streams by which these downs are permanently watered; and on the west by the Australian Alps, known here as the Warragong chain.

Towns in Auckland county.—Boyd, Eden, Pambula. *Rivers.*—Towamba or Kiah, the Towaca, Merumbal, Bega, Bomballa, and Bemboka. *Eminences.*—The Wanderer's range, and Mount Imlay, so named, after Dr. Imlay, who first explored the adjacent country. This eminence is an excellent landmark, being about 3,000 feet above the level of the sea. These natural savannahs consist of a series of undulations of hill and dale, lightly timbered, with a rich soil, and well watered by the Deuna, Shoalhaven, Queanbeyan, Murray, Murrumbidgee, and Mitta-Mitta rivers, are a very favourite residence for squatters, and are capable of yielding support to many thousand inhabitants.

MURRAY COUNTY is bounded on the north-east by the Boro creek, from its junction with the Shoalhaven river to its source in the hill of Wollowalar; by the range thence to the Aliano-yonyiga mountain, between Lake George and Lake Bathurst, and by a watercourse descending from that mountain to Lake George, by the northern shore of Lake George to the hill on the dividing range, by the range in the west overlooking its northern extremity, and thence by Gandaroo creek and Yass river to the Murrumbidgee; on the west, by the Murrumbidgee river to the junction of Miccaligo creek; on the south, by that creek to the Twins or Tindery Pics, passing between them to the source of Tindery creek, and by that creek to Queanbeyan river, by that river to the creek entering it from the hill called Tumanwong, and by a line from the source of Jerrabatgulla, in that mountain, to the junction of Currabeene creek with the Shoalhaven river, and on the east, by Shoalhaven river to the junction of Boro creek.

The length of this county is about seventy-eight miles; its breadth about forty-four miles. It contains several extensive tracts

of remarkable fertility, instances of which have been quoted in the description of the general character of the soil of New South Wales; and the oat-grass, before mentioned as growing spontaneously in Argyle, is also found here. A ridge of high land runs north and south through the eastern portion, in a somewhat parallel direction with the Shoalhaven river, which divides the county of Murray from that of St. Vincent. The most remarkable feature in this county is Lake George, which is stated by Sir Thomas Mitchell to have been in 1828 a sheet of water seventeen miles in length, and seven in breadth, the water being slightly brackish, but very good for use. The lake was then surrounded by dead trees (eucalypti) of about two feet in diameter, which also extended into it until wholly covered by water. It contained no fish; and an old native female said she remembered when the whole was a forest, a statement supported *pro tanto* by the dead trees in its bed. In 1836, Sir Thomas found the whole expanse covered with grass, and not unlike Breadalbane Plains. The site of Lake George, as also that of Lake Bathurst, in the adjoining county, is now under cultivation. The southern side of this *ci-devant* lake presents one continuous low ridge, separating its former bed from the head of the Yass river. According to Count Strzelecki, fragments of trees imperfectly fossilized have been discovered in this vicinity.

Towns.—Queanbeyan, situated on the Queanbeyan river; Bungendore, Yass, and Larbert. *Rivers.*—Yass, Jingery, and Molongo. *Creeks.*—Morumbateman, Gundaroo, Jerrabombera, Jinglemony, Croonmier, Modbury, Torallo, Majura, and Batmaroo. *Elevations.*—Mount Ainslie, Bywong, Gourock Pic, the Twins, Cockatoo Hill, Balcombe Hill, and One Tree Hill.

KING COUNTY is bounded on the east by the dividing range forming the western boundary of the county of Argyle from the head of the Crookwell river, in $34^{\circ} 30'$ S. lat., to the head of the Gundaroo creek, near Lake George; on the south by Gundaroo creek and the river Yass to the junction of Derringullen creek near Bowning hill; on the west by the range of Bowning hill to the head of Boorawa river, and by that river to its junction with the Lachlan; on the north-east by the rivers Lachlan and the Crookwell to its source, as before mentioned. Its length is seventy-six miles, its breadth forty-three miles. The Cullarin range runs

from north to south, dividing this county from that of Argyle. The county town, at present represented by the thriving little village of Gunning, is situated in a fine flat of considerable extent, very suitable for growing wheat, barley, oats, potatoes, and fruit of the British varieties. It is surrounded by a fine tract of grazing country. Gunning is 152 miles from Sydney, and nearly midway between Goulbourn and Yass, being distant from each about twenty-eight miles. The latter town, though of no great extent, (containing about sixty houses,) comprises a portion of two counties, being built on each side of the river Yass, which separates the county of King from that of Argyle. Yass plains or downs are also divided by this stream, whose bed (according to Dr. Lang) is 1,311 feet above the level of the sea. These tracts consist of fine grassy hills, thinly covered with wood, and fertile vales clear of timber. Mr. James says, "there appears no limit to the rich feed for sheep." The country is covered with flocks and herds. Proceeding from Gunning towards Yass plains there is a rapid descent from the higher level of the surrounding country. Dr. Lang estimates this descent at 800 to 1,000 feet. Near Yass, on the Sydney side of the river, is situated the well-built cottages and extensive gardens of Henry and Cornelius O'Brien, and of Hamilton Hume, J.P. Mr. H. O'Brien's grounds are very tastefully laid out. His numerous flocks and herds roam over an "hundred grassy hills," the progeny of a few sheep and cattle with which he sat himself down in the wilderness about twenty years ago. Civilization has now reached and surrounded him. Like the Antediluvian patriarch Jabel, Mr. O'Brien is considered "the father of such as dwell in tents," alias *bark huts*, and of such as have cattle and sheep beyond the boundaries of the colony, *i.e. squatters*. As stated under the head of commerce, Mr. O'Brien, finding the value of his stock wofully reduced by the panic in 1843, commenced the "boiling down" system, and converted his unsaleable live stock into the valuable export of tallow for the English markets.

Rivers.—Yass, Narrawa, Lachlan, Boorowa, Weeho, and Crookwell. *Creeks.*—Hovell's, Cullaba, Broman, Pudman, Derringullen, Bango, Gundaroo, Jarrawa, Dimond, Lambton, and Cartwright. *Eminences.*—Mount Darling, Mudoonen, Chaton, Dixon, and Narrawa.

GEORGIANA COUNTY is bounded on the east by the dividing range extending from the head of the Crookwell in 34° 30' S. lat., by Burra-Burra lake and Mount Werong, to the head of Campbell's river; on the north by Campbell's river to Pepper creek; on the west by Pepper creek and the range extending from its head toward the source of Rocky Bridge creek, and by that creek and the Abercrombie to the river Lachlan; on the south by the Lachlan and the Crookwell to its source as aforesaid. The length of this county is about fifty miles, and its breadth forty. The surface is irregular and varied, and in general well adapted for grazing, but only occasional patches on the banks of rivers and streams afford much promise of successful agriculture.

Towns.—Not any. The chief place is Bingham. *Rivers.*—The Abercrombie which rises in a mountain about three miles east of Mount Murrum, and after a course of about ninety miles, falls into the Lachlan; the Campbell, Isabella, Crookwell, and Bolong. *Creeks.*—Rocky Bridge, Tuena, Kangaroo, Glengarry, Mulgowrie, Julong, Kangaloolah, Phils, Copperhaunia, Muligonna, Carrawa, and Peppers. *Eminences.*—Werong and Mount Lawson.

WESTMORELAND COUNTY is bounded on the north-east by Cox's river from its junction with the Wollondilly to the small creek entering the Cox from the west, one mile south of the new road to Bathurst; on the north by that creek and one descending to Solitary creek, near its junction with Antonio's creek, and thence by the Fish river to Campbell's river; on the west by Campbell's river to its source in the dividing range, and by the dividing range of Burra Burra lagoon; on the south by the river Guinecor from Burra-Burra lagoon, to its junction with the Wollondilly; on the east by the Wollondilly to the junction of Cox's river above-mentioned. Length, sixty-four miles; breadth, thirty-two miles. Westmoreland is the most mountainous of the counties of New South Wales, and although the elevations are not of great height, seldom exceeding three to four thousand feet, they are numerous and generally barren. One portion of the Blue Mountains, two miles to the north of Swashfield, is 4,000 feet above the sea. The head of the Fish river four miles E.S.E. from Mobrin, is 3,472 feet; Mobrin is 3,275 feet; a hill near Bunbingle's creek is 3,554 feet; and one in Snake's valley is 3,576 feet.

Mounts Collong and Murrum are remarkable peaks. There are, however, some fertile spots and excellent grazing districts in Westmoreland. The Emu valley, ninety-nine miles from Sydney on the road to Bathurst, is an extensive morass. O'Connell town, near the Fish river, on the borders of Westmoreland and Roxburgh, in O'Connell plains, 115 miles from Sydney, is the chief station in the colony.

Rivers.—Cox, Campbell, Wollondilly, Fish, Kowmung, and Guinecor. *Creeks.*—Jouriland, Tonatti, Lacy, Antonio's, Lowther, King, Wiseman, Native-dog, Fish river, and Stony.

BATHURST COUNTY is bounded on the north-east by the Campbell river, from Pepper creek, and by the Macquarie river to the junction of Lewis's ponds; on the west, by Lewis's ponds creek to Blackman's swamp, and thence to the Canobolas mountains; thence by the Panuara range, and rivulet of the same name, to the Belubula stream, and by that stream to its junction with the Lachlan river; on the south, by the Lachlan river to the Abercrombie and the junction of the Rockybridge creek, also by that creek and the range to the head of the Pepper creek, and by the creek to the river Campbell, as first mentioned. The county is in length sixty-five miles, in breadth forty miles. This transalpine country was considered inaccessible until 1813. It consists in general of broken table land, in some places forming extensive downs, without a tree, such as Bathurst plains, which include 50,000 acres, and are about nineteen miles in length, and of a breadth varying from four to eight miles, undulating, and with the Macquarie river meandering throughout their greater length, occasionally ornamented with fringes of swamp oak. These plains are 2,100 feet above the level of the sea; they are not unlike the Brighton downs, but with this remarkable peculiarity, that on the summits of some of the elevations, or knolls, are found dangerous quagmires, or bogs, resembling sometimes the dry bed of a pond, but at other times concealed by rich verdure. "Fairy rings" are frequent, and on most of them grow fungi of a large size. With the exception of small portions of land in particular localities, allotted to veteran soldiers and emancipists, the county is parcelled out into large farms of 2,000 acres each; the proprietors being free emigrants of a very superior class. Bathurst county is one of the most flourishing districts in

the colony; its society excellent; its resources, as a fine-woolled sheep farming district, considerable; and so salubrious is the climate that the first natural death did not occur until 1826, *twelve years* after its settlement. Bathurst town, on the banks of the Macquarie river, is in $33^{\circ}24'30''$ S. lat., and $149^{\circ}29'30''$ E. long., twenty-seven miles and a half north of Government-house, Sydney, and ninety-four and a half W., bearing W. $18^{\circ}20'$ N., eighty-three geographical or ninety-five and a half statute miles, and by the road distant 121 miles. The town is flourishing, and has its literary institution, &c.

This county in particular presents remarkable instances of a singular phenomenon observable in various parts of Australia, namely, what would be viewed in a long civilized country as the most striking evidences of former cultivation, the land being laid out in ridges apparently marked by the plough, and with a regularity of intervals which would secure a prize from a Scottish agricultural society. These plough ridges occur always on gentle declivities, where there is a tenacious subsoil with loose superstrata, and are doubtless produced by the action of water; as there are found, even on the tops of mountain ridges, extensive beds of water-sand and water-gravel, mixed with fragments of shells, presenting the identical appearances observed on the banks of rivers, or upon sea-beaches; but still the *regularity* of the distances in the plough ridges is unaccountable.

Excellent limestone is found in the vicinity of Bathurst town.

Mr. W. H. Wells, the able compiler of the *Geographical Gazetteer of the Australian Colonies*, describes a "magnificent" natural tunnel or archway, discovered by Mr. Davidson not long since, forty-five miles west of Bathurst town, on the Grove creek, about four miles above the confluence of that stream with the Abercrombie, and seven miles from Mulgunia. The tunnel is, in length, about 300 paces; the north entrance is seventy feet broad and fifty feet high; towards the centre the breadth increases to ninety feet, and the elevation to 100 feet; at the southern extremity it is about 100 feet broad, and seventy to eighty feet high; the whole direction not exactly straight. The roof is thickly covered with stalactites of different colours, some hanging down to a length of twenty feet. The sides of the tunnel, especially on the left hand, have the

appearance of galleries raised one over the other, supported by apparent carved work and ornamental pillars, the whole adorned by splendid stalagmites of various forms. Other caverns of great extent, but not yet fully explored, branch out of the main tunnel; one of them contains two massive stalagmites, resembling a pulpit and a tomb. The descent to the tunnel is through a very narrow defile, through which a creek flows direct through the main chamber of the cave.

Towns.—Bathurst, before mentioned, and Carcoar, 144 miles from Sydney, on the Belubulu river. *Rivers.*—Macquarie, Campbell, Belubulu, Abercrombie, and Lachlan. *Creeks.*—Rockybridge, Frederick's valley, Emu swamp, Peppers, Queen, and Princess Charlotte's vale; Foster ditto, Swallow, Coombul, Coombing, Lewis ponds, Cadiangullong, Muramer, Mundoraman ponds, Milburn, Grubbenburn, Muringulla, Limestone Wangola, and Panuara. *Plains.*—Bathurst, Warwick, King's, Dunn's, and Pretty plains. *Eminences.*—Canobolas, and the Three Brothers.

WELLINGTON COUNTY, north-west of Bathurst, is bounded on the north-east by the river Cudgegong; on the north-west by that river and the Macquarie, to the junction of the river Bell, near Wellington valley; on the west by the rivers Bell, Molong, and Bore-nore creek, to the Canobolas mountains; on the east by this range, and thence to Blackman's swamp, and by Lewis ponds, the Macquarie, Turon river, Cunningham's creek, and Cudgegong creek, under Bocobel, to the Cudgegong river. It is, in length, seventy-two miles, and in breadth forty-two miles. This county is famed for a beautiful and fertile valley, (Wellington valley), situated at the junction of the Bell and Macquarie rivers, distant 238 miles from Sydney, and 117 from Bathurst. The scenery is very charming, and the soil richly productive. In this county, as stated at pages 398-9, Sir T. Mitchell discovered some remarkable caves in the side of a low hill, sixty-five feet above the adjacent alluvial flat of Wellington valley. The entrance consists of two crevices, between large blocks of limestone, in one side of a hollow about twelve feet deep, and which has evidently been widened by water. One of the caves, at 180 feet from its mouth, has a height of sixty feet, and a breadth of twenty-five feet: the floor consists of reddish earth. A gigantic stalactite, at the lower end of the

cavern, gives somewhat the appearance of a vast Hindoo idol. Some of the caves have not been fully explored. The osseous remains found in these caves are very remarkable; some of the fossilized bones are supposed, by Professor Owen, to have belonged to a very large species of the kangaroo tribe, which is now extinct. Mudgee, the chief town of the county, is pleasingly situated on the Cudgegong river. Another township, called Neurea, has been laid out.

Rivers.—The Macquarie, (which runs through the county), the Cudgegong, Bell, Molong, and Turon. *Creeks.*—Cunningham, Meroo, Pyramul, Nubrygin, M'Donald, Piambong, Merrenda, and Warradugga. *Eminences.*—Two ridges of mountains run from east to west, of which the most prominent elevations are Corcalgong, Bocobel, Boiga, and Yammin.

ROXBURGH COUNTY, north of Bathurst and Westmoreland counties, is bounded on the north by the Cudgegong river from the Mount Durambang, by Canguddy creek, to the junction of Cudgegong creek, on the east of Mount Bocobel; on the west by that creek, by Cunningham's creek, and by the Turon river to the Macquarie river, which latter, along with the Fish river, to the junction of Solitary creek, forms the southern boundary; on the east by Solitary creek to Honeysuckle hill, and thence by the dividing range to the head of Cook's creek, and by the creek and the Cudgegong river and Umbiella creek, to Mount Durambang. Length, fifty miles; breadth, forty miles. The county is very hilly, but has rich pasturage, some fertile spots, and is well watered. *Chief town*—Kelso, on the Macquarie river, 112 miles from Sydney.

Rivers.—Macquarie, Cudgegong, Fish, Turon, and Capertee. *Creeks.*—Warra-gunnie, Tabraboucha, Umbiella, Cook's, Coolamigel, Roundswamp, Antonios, Solitary, Jabez-Jabeck, Winburdale, Cunningham's, and Mallamurra. *Eminences.*—Tayan Pic, which is visible from the Wolombi hills, in Northumberland, distant forty miles, and also from the Honeysuckle hill, on the Bathurst road, forty miles distant: hence this elevation became a well-known point in the trigonometrical survey by Sir Thomas Mitchell, of the settled districts in New South Wales. The other eminences are Mounts Rankin, Ovens, Clandulla, or Marsden.

COOK COUNTY, adjoining Cumberland, is bounded on the north-east by the Colo

river, which is also called the second or lower branch of the Hawkesbury; on the north by the rocky dividing range, extending east and west, between the rivers Hunter and Hawkesbury, and forming the south boundary of the county of Hunter; on the west by the range dividing the waters to Honeysuckle hill; and hence to where the Mount Blaxland road crosses Cox's river; on the south-west by Cox's river; on the east by the Warragamba, Nepean, and Hawkesbury, to the junction of the lower branch, as above mentioned; it is in length sixty miles, and in breadth forty-four miles. A great part of Cook county is occupied by the Blue Mountain range, across which the fine road from Sydney to Bathurst lies. Table land, from 2,000 to 3,000 feet high, abounding in picturesque scenery, occupies a considerable portion of the county. Emu plains, and several fertile valleys, compensate, in some measure, for the large quantity of rocky soil in this county. At King's table land (2,727 feet above the sea) the view is magnificent; for eighteen miles from the commencement of the ascent of the Blue mountains at Emu plains, the slope is gradual; from thence to the twenty-sixth mile is a succession of steep and rugged hills, some almost so abrupt as to deny a passage across them to King's Table Land, on the south-west of which the mountain terminates in lofty precipices, at whose base is seen the beautiful Prince Regent's glen, about twenty-four miles in length. From Mount York (3,292 feet high) the view is magnificent—mountains rising beyond mountains, clothed with impenetrable forests, with stupendous masses of rock, forming buttresses, in the foreground. The Vale of Clywd, so called from its resemblance to a vale of the same name in North Wales, Britain, is 2,496 feet above the sea, and runs along the foot of Mount York, 796 feet below the summit of the mountain, extending six miles in a westerly direction. The soil is rich, and the scenery very beautiful. In the valley, near the inn called the *Weather-boarded Hut*, on the road to Bathurst, there is a line of perpendicular cliffs, of immense height, which has a small cataract termed *the Falls*. At the point where the rivulet leaps over the precipice, the cliffs recede considerably, forming, according to Lang, two bold headlands of fearful elevation, and enclosing a basin of prodigious depth, in which the tops of lofty trees are seen several hundred feet below the preci-

pice. When the rivulet is flooded, the scene is magnificent; in other seasons, the waters are separated into distinct atoms, and are precipitated to the bottom like innumerable particles of frozen snow. The great western road from Sydney to Bathurst, over Mount Victoria, was originally very imperfect and steep. According to the design of the surveyor-general, Mitchell, in 1827-8, recommended by a road commission in 1829, a new line over the Blue mountains was commenced in 1830, and three gangs of convicts, consisting of 250 prisoners, under colonial or secondary sentences, with ankle fetters of seven to ten pounds each, were located near the intended road, in a stockade prepared for the purpose, with huts around for a guard of soldiers. The dense forest that covered the projected road was first cleared and burned, chasms were filled by immense masses of blasted rock; and walls of extraordinary thickness, and of a height of fifty to eighty feet, connected one precipice with another, and preserved a continuous or gradual scale of declivity; a defile was cut through the solid rock, of twenty to thirty feet deep; and finally, in 1832, the *Victoria Pass* was opened to the public, in due form, by the governor, Sir R. Bourke.

Towns.—Hartley, seventy-eight miles from Sydney, the chief town, is built on the west bank of the river Lett; the other towns are Emu, Wilberforce, Bowenfels, Rydal, and Colo. Emu township, thirty-five miles from Sydney, is laid out on the rising ground of Emu plains, behind the government farm, on the banks of the Nepean. The seat of *Edenglassie*, (called by Sir Francis Forbes, the late chief justice of New South Wales, after the family seat in Aberdeenshire, North Britain, of the lamented Sir Charles Forbes, Bart.) is about two miles up the river, on a fine reach, capable, says Mr. Wells, of "floating a dozen men-of-war." *Rivers.*—Grose, Colo, Cox, Nepean, Hawkesbury, Lett, and Warragamba. *Creeks.*—Wheeny, Meroo, Billong, Currency, Wollinganby, Bowen, Wolgan, Farmer, and Cook. *Eminences.*—the Blue mountains, Honeysuckle hill, Mounts Walker, Clarence, Victoria, Tomah, King George, and Hay.

NORTHUMBERLAND COUNTY, which intervenes between Hunter county and the sea, is one of the finest in the colony; it is bounded on the north by the river Hunter, and on the south by the Hawkesbury, to the sea-coast, which forms the eastern

boundary; and on the west by Wollombi brook, the junction of Parson's creek, by that creek to its head in the range dividing the waters of the Hawkesbury from those of the Hunter, by Warring creek, to its junction with the Macdonald river, or lower branch of the Hawkesbury, and by the said lower branch to its junction with that river. The length is sixty-one miles, breadth fifty. There are some fine elevations, commanding extensive prospects; but the general aspect is a series of undulations and elevated plains, intersected by numerous creeks, streams, and rivulets. The river Hunter affords a means of water communication throughout its northern boundary, and along its alluvial banks, some of the most flourishing farms and estates in the colony are situate. Yarramalong is a beautiful vale, distant twenty miles from Brisbane water, and watered by the Jilliby-Jilliby creek. Lake Macquarie, or Awaba, twelve miles south of Newcastle, is the largest lake in New South Wales, and famed for the beauty of the surrounding scenery. The entrance is at the head of "Reid's Mistake," distant 105 miles from Sydney. Newcastle (native name Mulu-binha), in $32^{\circ} 55' 50''$ S., about eighty miles from Port Jackson, is the maritime town of the county, and fast rising into eminence, not less by reason of its position at the commencement of the navigation of the Hunter, than from the locality of the coal mines, now actively worked by the Australian Agricultural company. Maitland, on the Hunter river, at its junction with Wallis creek, 127 miles from Sydney, and twenty-five miles from Newcastle, is the seat of the county executive, and a neat and flourishing settlement. The town is divided into East and West Maitland, built on each side of Wallis creek. There is a spacious court-house, a large gaol, several church of England, Presbyterian, Wesleyan, and Roman catholic temples of worship. The Roman catholic chapel is a handsome structure. East Maitland is better supplied with water than West Maitland. Coal, of excellent quality, is worked on both sides of Wallis creek, and delivered to the consumer at six shillings per ton.

Morpeth, originally called the Green hills, is a rising town, picturesquely situated at the head of the navigable part of the Hunter river, twenty-nine miles by water from Newcastle. It contained, in 1848, a church and parsonage, a Wesleyan chapel, a ladies' school, and two day schools; five inns, a steam flour-mill, soap and candle manufac-

tory, some excellent shops, thirty-seven stone and brick buildings, and 117 wooden tenements. The extensive wharf and stores of the Hunter River Steam Navigation Company are at Morpeth, and throughout the greater part of the year there is a daily steam-packet communication with Sydney, with which also there is a considerable trade in sailing vessels. About two acres on the bank of the Hunter river are used as a government wharf. Good coal is found in the vicinity. Morpeth, like Boyd, and other towns in New South Wales, is built on land belonging to private individuals, who naturally seek to improve the value of their property by promoting the formation of towns in eligible places.

The extraordinary progress of the colony of New South Wales is evidenced in the manufacturing industry evinced in many of the towns. In Maitland, for instance, we are told, that—

"Porter and ale of excellent quality are now brewed there. The Irrawang pottery is so good, that the demand greatly exceeds what can be produced, from the paucity of good workmen. Tweed is improved so much, that it sells in Sydney to such an extent that the district market is often very inadequately supplied, though two establishments are in active operation. The tobacco manufactured in Maitland and the district is nearly all sold in Sydney, and the demand for it is gradually increasing. The growth of the vine is greatly extending, though but little wine has been yet brought into market; manifest improvement is however visible in what is brought forward. Leather and soap are produced to a great extent, and of excellent quality. Iron, salt, and a variety of other articles, are rapidly improving."

The *Maitland Mercury*, published bi-weekly, is an excellent provincial newspaper.

Towns.—Newcastle, Maitland, Singleton, Morpeth, Wollombi, Hexham, East and West Gosford, and St. Alban's. *Lakes.*—Macquarie, Brisbane Water, Tuggerah Beach, and Wamberall.

HUNTER COUNTY, north of Cook county, and separated from the sea by Northumberland county, is bounded on the north by the river Hunter, and also by the Goulbourn to the junction of Widdin creek; on the west, by Widdin creek to the Coricudgy mountain, by the range thence to the Durambang hill; on the south, by the Colo river to the Hawkesbury river; on the east, by the Hawkesbury to the north of the Macdonald river, or lower branch; and on the north-east, by the Macdonald river to the junction of Wareng creek, and by Wareng and Parson's creeks, and the Wollombi creek, to its junction with the Hunter river. Length,

from north to south, seventy-one miles; breadth, east to west, forty-seven miles.

The aspect is mountainous, and occasionally very wild. The chief town, called after the plains in which it is situated, Jerry's, is on the Hunter river, 122 miles from Sydney.

Rivers.—Hunter, Goulbourn, Macdonald, Wollombi, and Colo. *Creeks.*—Webb's, Parson's, Wollum, Putty, Widdin, James, King, Greig, and Doyle. *Eminences.*—Nullo, Coricudgy, Monundilla, and Wambo.

PHILLIP COUNTY is bounded on the north by the river Goulbourn, from its source, near the head of Wialdrar creek, to the junction of Widdin creek; on the north-west, by the Cudgegong river, from its source, at Mount Durambang, to Wialdrar creek. Its length is fifty-three miles, and its breadth forty-one miles. Rytstone is the chief place.

Rivers.—Goulbourn, and the Cudgegong. *Creeks.*—Widdin, Cooyal, Pipeclay, Lawson, Moorlarben, Wilpingong, Bylong, Barrigan, and Wollar. *Eminences.*—Pomary, Runker's Peak, Cox's Crown, and Mount Penny; but these are only hills of inconsiderable height.

BLIGH COUNTY, bounded on the north by the Liverpool range from Mount Mac Arthur to the head of Coolaburragundy river, by this and the Talbragar river to the junction of a small creek two miles east of Balara; on the west by a connected ridge extending from the head of the creek aforesaid to a hill five miles north of the junction of the Bell with the Macquarie river, and thence by a line south to the Macquarie; on the south-west by the Macquarie to the junction of the Cudgegong river, and on the south-east by the Cudgegong river; and Wialdrar creek, to the source of the latter in the dividing range at the head of the Goulbourn river, thence by the Goulbourn and Krui river to Mount Mac Arthur or Liverpool range. Length, about eighty miles; breadth, forty miles. There are several rich plains, viz., Harrison's, Krui, Nandoura, and Wellington valley; the most prominent mountains are Mooa, East Bluff, Pandora's Pass, and Gobalion. Ailsa, on the Krui river, is the county town; the others are Dalkeith and Montefiores.

Rivers.—Macquarie, Goulbourn, Talbragar, Erskine, Krui, and Cudgegong. *Creeks.*—Coolaburragundy, Teeree, Four Mile, Cookabulgo, Munmurra, Peters, Derrinderry, Stony, Krui, Moons, and Wildra.

BRISBANE COUNTY is bounded on the north-east by Hunter river, from its source in lat. $31^{\circ} 46'$, to the Goulbourn river, and

thence to the Krui river; on the west by the Krui river to its source at Mount Mac Arthur or Moan in the Liverpool range; on the north-west by the Tinagroo and Temi mountains to the head of the Hunter river. Length, ninety miles; breadth, forty miles. The aspect of the county consists of several ranges of table-land, with occasional plains and peaks; one, Mount Wingen, or the Burning Mountain, in $31^{\circ} 54'$ S. lat, and $150^{\circ} 56'$ E. long., described in the Geological section, has an elevation of 1,500 feet above the sea.

Towns.—Murrurundi, chief, on Page's river; Haydonton, Scone, Merriwa, Cassilis, Invermein, and St. Aubin's. *Rivers.*—Goulbourn, Hunter, Page, Isis, Krui, and Werrenul. *Creeks.*—Krui, Moon, Coulson's, Bow, Gummum, Hall, Giant, Waybong, Dartbrook, and Kingdon. *Plains.*—Bow, Krui, Gummum or Gammon Plains, 150 miles from Sydney. *Eminences.*—Mount Tinagroo, Tereil, Murulla, Oxley's peak, and Tomarra.

DURHAM COUNTY is bounded on the east by the Williams river to its source, and thence by the Mount Royal range to the head of one of the branches of the Hunter river in lat. $31^{\circ} 46'$; and by that river on the west and south to the junction of William's river above-mentioned. Length, sixty miles; breadth, fifty miles. Fertile and well watered. The fine district of Patrick's plains includes the middle portion of Durham county, the north-east portion of Hunter county, and the north-west portion of Northumberland county. Paterson, the county town, is situated on the river of the same name, distant 130 miles from Sydney. Other towns—Muswellbrook, Seaham, Clarencetown, Dungog, Hinton, Gresford, Merton, and Camberwell.

Rivers.—Hunter, Williams, Patterson, Allyn, and Bouchell. *Creeks.*—Stewartsbrook, Sandy, Muswell, Saltwater, Fay, Fall, Carrow, West, Glendon, Myall, and Lambvalley. *Eminences.*—Mounts Royal, Wollen, M'Arthur, Drying, and Tangorin.

Dungog, one of the towns or villages in Durham county, is noted for its position and prosperity. It is situated on the banks of William's river, a considerable way below the Chichester river, both of which streams are famed for their clearness and purity. The village covers a succession of ridges which are said to "fall into one another like the fingers of clasped hands." These ridges are thinly wooded, and government has preserved

ample space for promenade and circular pleasure-grounds near the beautiful reaches and bends of the river. There is a church, two schools, two large inns, a steam flour-mill, court-house, horse-barrack, horse-breaking and training stables, boiling-down establishments, several good dwelling-houses and neat farms in the vicinity; a cheerful peal of church bells, and a band of rustic musicians. "From one end of the town," says Mr. Wells, "to the other, the voice of children and the hum of industry fall upon the ear." The country around is wildly picturesque.

GLOUCESTER COUNTY, bounded on the west by the Hunter river, on the south-west by William's river to its source, and thence by the Mount Royal range bounding the county of Durham to the principal source of the Manning river; on the north by the Manning river to Farquhar inlet, south-east by the sea-coast. Length, eighty miles; breadth, sixty-five miles. The northern parts of the county are mountainous, but there is much good land both for grazing and agricultural purposes. At the entrance of Port Hunter or Newcastle bay, there is a small but rather lofty island, called Nobby's Island, somewhat resembling the Craig of Ailsa, or the Bass Rock on the coasts of Scotland, apparently composed of indurated clay supporting a stratum of sandstone, over which there is a stratum of coal, the clay appearing to rest on a substratum of silicious substance. The indurated clay consists of thin laminae, into which it may be easily separated with a knife, and which present innumerable impressions of vegetables. Dr. Lang says—"I have seen such impressions in specimens of the clay obtained at a height of fifty to a hundred feet above the level of the sea. It appears indeed to consist of nothing else but masses of vegetable matter, which, at some former period in the history of the earth, must have floated in a solution of clay. Nobby's island has evidently been originally joined to the mainland; the intervening channel to the southward being still narrow, shallow, and rocky, and the successive strata of which it is composed corresponding with those of the main."

The features of the coast about Port Stephens are different from those seen to the southward. A number of conical hills, four to six hundred feet high, are visible; two of them—Wacaba and Tomare, constitute the entrance points of Port Stephens—which is a large estuary, fifteen miles in length, and

contracted near the centre to the breadth of a mile, and subsequently further lessened by a woody islet. Nearly two miles within the estuary, on the west shore of the harbour, is the town of Carrington, belonging to the Australian Agricultural Company; and half-a-mile to the westward is Taklu, the charming residence of the superintendent, situated on the crest of a green grassy slope, over which are scattered numerous small bushy lemon-trees, the deep verdure of their foliage interspersed with golden fruit, contrasting with the light-green carpet from which they sprang.*

The estate of the Australian Agricultural Company in New South Wales, comprises an area of upwards of a million of acres, and consists of three separate extensive tracts, situated about 100 miles north of Sydney, between the 32nd and 33rd parallels of south latitude, approached by the fine harbour of Port Stephens, which forms its southern boundary. The southernmost of these tracts is designated the Port Stephens grant; north-west of Port Stephens is the Liverpool Plains grant; and the north-east of Liverpool plains is the Peel's River grant. The Port Stephen's grant is estimated to contain 464,640 acres, and to extend between twenty and thirty miles inland from the sea coast; bounded on the north by the "Manning," a river of comparative magnitude, commencing a little above the head of the navigation, and extending inward or westward twenty miles; on the west by a line south, separating the company's lands from those reserved by the crown for ecclesiastical and educational purposes; on the east by a parallel line separating the same from the crown lands; and on the south by the Karuah river and Port Stephens, a harbour second only to that of Sydney or Port Jackson on the eastern coast of New Holland. The general appearance of the land is hilly, with well-watered valleys, of good soil and pasture, and with abundance of the best description of timber, for building, fencing, and rural purposes generally. The character of the soils necessarily varies with the formation, but they are all capable of growing grain, (maize and millet luxuriantly,) tobacco and cotton, the vine, olive, orange, and citron, and almost every variety of fruits, even to the banana, which flourishes in sheltered situations, and within the influence of the sea air. The valleys, though narrow, afford sufficient scope of rich alluvial soil on the

* *Stokes's Voyage in H.M.S. Beagle.*

banks of the streams for all the purposes of agriculture; the receding and higher lands being well calculated for arboriculture and vineyards; whilst the loftier ranges are clothed with a short, sweet, and nourishing grass, for the pasturage of sheep or cattle—and it is remarkable that the wool produced from the Company's sheep depastured on those hills near the coast, has invariably, from its fineness of texture, realised nearly sixpence per pound more than that produced from a similar breed of sheep fed in the interior, where the grass is more rank. A considerable portion of the lands in this county belonging to the Australian Agricultural Company is of excellent quality, and has been rendered very valuable by the well-directed labour and capital bestowed upon it. Count Strzelecki thus expresses himself concerning the agricultural capabilities of this part of New South Wales and the progress of cultivation:—

“That portion of the country which, from its system of working, and range of tillable land, deserves to be included within the agricultural district, is confined to the valley of the Karua, which is limited in the extent of its cultivated, but not of its cultivable land, and of which the best tracts are in the possession of the Australian Agricultural Company; to the valley of the Hunter, composed of the confluent valleys of the Goulbourn, Pages, Patterson, and Williams rivers, &c.; the valley of the Parramatta. * * * In these localities, a good many farms are in a very forward state; many exhibit remarkable improvements, and some display only partial attempts, all of which are, however, in the right direction. The farms of the Australian Agricultural Company at Stroud and Booral, the most northern farms of the colony, may be regarded as the first in the rank of improvements. The farm buildings are of the best construction; the tilled lands are almost entirely clear of timber and stumps, well fenced in, well ploughed and worked, and presenting, on the whole, gratifying proofs of well-bestowed capital and labour.

“The orchards and vineyards of the company at Tahlee (Port Stephens), which produce the choicest grapes, oranges, and lemons, are not less worthy of notice. It is this orchard which shews most forcibly the extensive range which the beautiful climate of New South Wales embraces in isothermal lines; as there the English oak is seen flourishing by the side of the banana, which is again surrounded by vines, lemon and orange trees of luxurious growth. To the southward of Port Stephens are a series of thriving farms, spreading along the Goulbourn, Pages, Hunter, Patterson, and Williams rivers, which comprise an agricultural district of 2,000 square miles in extent. The excellent harbour of Newcastle (in Northumberland county), good water and tolerable roads, a coal mine, a soil well adapted for wheat, barley, turnips; the vine and European fruits, and a situation the most favourable to the application of irrigation, render this district one of the richest and most important in the colony.”

The little river Karuah, flowing into the north-west corner of Port Stephens, is

navigable for twelve miles, to a place called Booral, where all goods are landed for the Company's stations up the country. Mr. Ebsworth, the treasurer, resides there in a charming cottage almost covered with roses and honeysuckle, and commanding two picturesque reaches of the Karuah. To this gentleman, and to his cousin, Mr. Henry Ebsworth, many years the faithful secretary of the Australian Agricultural Company, great credit is due for the careful superintendence evidenced in the practical working of the judicious and equitable system adopted by this association. Near the town of Gloucester in this county, is an abrupt range of densely wooded hills, called the “Buckets,” which rise to a height of about 1,200 feet above the plain, their summits crowned by precipitous masses of naked rock of fantastic contour, not unlike the castled crags of the Rhine. The situation of Gloucester village is very picturesque; it is a large cattle farm belonging to the Australian Agricultural Company. The village of Stroud, not far distant, is a horse-station of the company: its English character is exemplified by the neat little gardens belonging to the mechanics in the service of the Australian Agricultural Company, and by the cottages covered with roses and honeysuckle.

On the crest of a range of hills in this county, overlooking some wooded lands belonging to the church of England, a singular natural phenomenon has been lately discovered: the front of the line of hills “strikingly resembles the ruins of a fortress: the masses of rent rock are dotted with vast balls, half fixed, and of the exact size of cannon balls: they are easily displaced, leaving a socket, as if they had originally been plunged there by artillery. The balls are very heavy, of a sparkling granite, surrounded in the centre by a white flimsy circle, which it was found impossible to chip.” * Specimens of these balls have been sent to the British Museum and to the Geological Society of London.

Towns.—Raymond Terrace (the chief); Carrington, on Port Stephen's harbour; and Stroud, on the Karuah river. *Rivers.*—Manning, Williams, Chichester, Gloucester, Barrington, and Karuah. *Creeks.*—Tilligerry, Serpent, Limeburners, Onall, Pipeclay, and M'Arthur's. *Eminences.*—Mounts Tallowah and Kanghat.

* *Geographical Gazetteer*, by W. H. Wells, Esq., p. 184. Sydney, 1848.

MACQUARIE COUNTY is bounded on the south by Manning river, from Farquhar's inlet to its confluence with the Barnard river; on the west by a line from the said confluence to Mount Sea-view, and thence by a line to Kippara, a pass in the range dividing the waters of the M'Leay river from the waters of the Wilson river; on the north by that range to the source of the south branch of the Maria river, and thence by that stream to the first section line in the parish of Kalateenee, west of the east boundary of that parish, thence by that section line to the M'Leay river; on the north-west, by the M'Leay river to its mouth, inclusive of the islands; and on the east, by the sea coast, which is picturesquely marked by Crescent head, Point Plomer, Tacking point, Indian and Crowdy heads. The general features of the county are hill and dale, with open forest or grass land, lightly covered with good timber, and free from inundations. Captain King, speaking of this county and the adjacent districts, says, "there are here twelve million acres, in which it is difficult to find a bad tract, and they are in general watered with clear small streams." There are several elevated mountains in the county, viz.—the Three Brothers, Cairncross, Comboyne, Cocome-rico or Mount Sea-view, Kippara, Colapotamba, and the Brokenbago range, which latter divides the basin of the Hastings from that of the Manning river, and is covered all over with a dense forest. On the highest summit of this range, a tall pinnacle of naked rock shoots up perpendicularly above the trees like a church steeple. In some parts of the county, for instance, to the north of the river Manning, there are extensive plains; those called the "Jamaica plains," have an intensely green verdure, as contrasted with the more yellow tinted green of the grassy forest hills. Some large flats are covered with high grass, and timbered by large blue gum and "tea trees," standing widely apart from each other. At the junction of the Manning with the Gloucester river, the scenery consists of ranges of hills either very lightly wooded and grassy, or else covered over with brush timber and entangled vegetation. Most of the park-like hills have rounded conical summits; one heavily wooded range on the south bank of the river is crowned by huge masses of rock overgrown with creepers, which resemble the ivy-clothed battlements of some ancient fortress. Between the Wilson and the

Hastings river, is a very thickly wooded undulating country, tolerably grassy, and intersected by moist tea-tree flats and sedgy hollows. The country at the junction of the Hastings with the Maria river, has a fine appearance, as the reaches of the Hastings are of great length, and have an uniform breadth of about a quarter of a mile. The handsome villa of Dr. Carlisle is on the right bank, and on the left, a pretty cottage with a flourishing garden of vines and fruit trees. The Three Brothers rise majestically near Indian head, their lofty summits overtop all the woody heights by which they are encircled, and command an extensive inland, as well as a broad sea view.

Port Macquarie (278 miles from Sydney, lat. $31^{\circ} 25' 45''$ S.), the county town and the most important north of Maitland, is situated within the harbour on the south side of the Hastings river, and divided into East and West Macquarie, by Coolenbang creek. It is a harbour into which vessels drawing more than nine feet of water cannot safely enter; but there is good anchorage outside, and the shore is not dangerous. The town is well built, on a gentle rise; the houses generally of brick, surrounded by neat verandahs and trellice work; the streets broad, straight, coated with dark red gravel, and levelled like garden walks. A tall square church tower is conspicuously prominent in the highest part of the town. A group of magnificent trees encircles Port Macquarie, and extends along the banks of the river; to the west and north-west is a wide extent of forest country, and among the mountain ranges may be traced the windings of the valley through which the Wilson river flows. Mount Caoulapatamba is sufficiently near to render visible every tree on its grassy declivities, whilst the distant ranges at the M'Leay river, and the huge frowning mountain at the back of Cogo, are half dissolved in blue ether. The beauty and fertility of the land in this vicinity has been noted by several writers, especially the luxuriant vegetation of the coast, when approaching Port Macquarie; dense thickets of cabbage palms and myrtle trees extend down the gently sloping declivities, even within reach of the ocean spray, and every unwooded patch is covered with grass. The lofty forest, too, rises luxuriantly close to the sea, and the tints of the rocks, the foliage, the verdure, are all of a warm mel-low hue.

The other towns are Hay, Ballengarra, and Maria-Ville. Kempsey village, at the termination of the north boundary of Macquarie county, twenty-eight miles from the mouth of M'Leay river, has several good brick-built cottages, an inn, store, &c. A fine garden here, belonging to Mr. Sullivan, has fruit trees of all descriptions in greater luxuriance than is to be seen in any other part of the colony. The land in this neighbourhood yields good crops of wheat in dry seasons, and maize at the rate of 75 to 100 bushels per acre. One farm, belonging partly to Mr. Hodgkinson, which had been under the plough for six years, yielded two crops annually—maize, followed by either wheat, potatoes, sugar-loaf cabbages, or Swede turnips. The crops of cabbages and turnips cultivated for the pigs, were twice as abundant as good crops in England. Potatoes were large, but had an earthy flavour.

The principal agricultural farms in the county of Macquarie, are situated on the banks of the Wilson river—a tributary of the Hastings, and a never-failing stream flowing through a narrow valley;—they now form a continuous chain for about fifteen miles, and a very good road connects the whole of them with the town of Ballengarra, where the Wilson river becomes navigable for boats about twenty miles distant, by water, from the town of Port Macquarie. These farms are all composed of alluvial soil of excellent quality.*

On the banks of the M'Leay river, on the northern frontier of Macquarie county, the alluvial brushes which prevail on the lower part of the stream, are superseded where the stream ceases to feel the influence of the tide, by park-like forest ground, verdant rocky eminences, and luxuriant grassy flats of the greatest richness, lightly timbered with apple-trees (so called by the colonists, from the resemblance of the foliage to the English fruit-tree of that name; the tree is the *angophora lanceolata*), whose gnarled branches and light green foliage, render it the most picturesque forest tree in Australia. Several small tributary streams join the upper course of the M'Leay; from the South Dongai creek, whose narrow valley consists of a border of alluvial flats covered with broad-bladed grass growing breast high,

and with a few large blue gum trees scattered so far apart as to offer no impediment to immediate tillage, which is carried on here by the squatters. Dongai creek is hemmed in on both sides by fertile ranges well clothed with grass, and lightly wooded; the scenery is described as very pleasing; the ranges rise in smooth round cones, and their sloping sides, covered with bright green verdure, contrast strongly with the dark glistening green of the brush vegetation, which occasionally invades some of the hills. The stream itself, says Mr. Hodgkinson, is of crystal brightness; it rushes rapidly through the glen, over a bed of large pebbles, and frequently forms diminutive cascades; "this, with the magnificent trees and beautiful flowering creepers, forming natural arches, with a glimpse of distant hills softened and blended with the deep azure of an Australian sky, cannot fail of affording gratification to any one who can admire nature unadorned by art."

Rivers.—Hastings, Wilson, Maria, Manning, Brumo, Ellenborough, and Forbes. *Creeks.*—Tymbank, Piper's, Limeburner's, Pappinburra, Limestone, Koolobungan, Kin-dee, and Cathie. *Lakes.*—Many, but of small extent; principal—the Innes, Queen's, Watson, and Taylor.

The climate of this division of New South Wales is said to be more agreeable than that of Sydney; the mountains approach nearer to the coast, collect the vapours from the sea, and cause more frequent rains; in summer, especially, the heat is mitigated by many heavy thunder showers. It is almost entirely exempt from the hot winds, which are frequent during the summer months, in the more southern parts of the colony; moreover, the north-eastern part of New South Wales, between the great main range dividing the eastern and western waters and the ocean, has never experienced the long droughts which appear to occur septennially in the central and western districts. The greatest drought experienced in the Port Macquarie neighbourhood, was in 1841–2, when the natural grasses were quite desiccated, and the whole country continually in flames, the only young grass for the cattle and the sheep being in the flats; but the water-courses were as full of water as ever; and the wheat crops—which had failed near Sydney—yielded abundantly on the alluvial farms on the banks of Wilson's river—in some places averaging forty bushels of sixty-five pounds each, to the acre.

* Hodgkinson's *Australia from Port Macquarie to Moreton Bay*; to which work I am indebted for much recent information concerning the topography of this portion of the country.

From Moreton Bay to the Manning river, the southern boundary of the county of Macquarie, a distance of about 270 miles along the coast, there are nine rivers, viz.—the Brisbane, Tweed, Richmond, Clarence, Bellengen, M'Leay, Hastings, Camden Haven creek, and the Manning. Dr. Lang, speaking of this region, which he terms *Cook's-land*, says, "I can fearlessly challenge any European geographer to point to any tract of country of equal extent, and within the same parallels of latitude, in either hemisphere, on the coast of which there is a greater number, either of streams of water, or of rivers available for inland navigation."

Several other counties have recently been proclaimed (see map of New South Wales), to the northward and eastward of Macquarie county, but of these I can obtain no details; some description of the rivers flowing through this tract of country, viz.—the M'Leay, Nambucca, Bellengen, Clarence, and Richmond rivers, will be found at p. 489. The country at the base of the main range dividing the basin of the M'Leay river from that of the Nambucca, is generally grassy forest land, thickly timbered with gigantic black butt gum trees and other eucalypti, abundantly watered with numerous permanent chains of water-holes and gravelly water-courses in brushy hollows. From the summit of an elevated range extending to the westward, through Dudley county, in an undulating outline of conical summits, a magnificent and extensive view is afforded; to the westward, amidst a confused mass of mountains rising beyond mountains, covered with forest, the eye can trace the deep, narrow, brushy valleys of the streams forming the Nambucca, curling into the deep mountain recesses. In the north-west direction, tier beyond tier rose in serrated ridges of steep, high conical summits, the view bounded by the dim blue outline of a level crested range of considerable altitude. To the east the eye embraces the dense forests and swamps on the Nambucca river—the silvery stream of its tranquil reaches, and the blue surface of the Pacific, twenty-five miles distant. Towards the foot of these different ranges are grassy slopes—in some places, dwarf palms and ferns have usurped the place of grass—in others, magnificent cedar groves—and on the banks of creeks, enormous wild fig-trees.

A range of mountains characterized by a chain of conical summits, with an average height of 2,500 feet above the sea, divides the

Bellengen river from its tributary Odalberrec. This range is composed of soft micaceous talc, coated with a deep soil, and covered on the summit and steep slopes, with luxuriant grass. For twenty miles the summit of this razor-back ridge was found too difficult for riding, the undulations being too steep and frequent. From the top was seen the narrow glen of the Bellengen river, immediately opposite to which, on the north side of the river, rises a gigantic range of about 5,000 feet high, with perpendicular buttresses of 3,000 feet elevation. The outline of this range is a level table land, broken near the coast into undulations, with steep conical summits. A beautiful grassy forest immediately overlooks the Bellengen river, where there is much alluvial land, with brush, cedar plains, and forest flats. The richness of the soil may be judged of by the great size of the cedar and rosewood trees on its banks. The casuarina also grows to such an uncommon height, and the foliage assumes such an unusual form, that it might be mistaken for a species of pine. On the small clear plains a coarse-bladed grass grows more than two feet high, and appears like small wheat fields; the grassy flats are principally wooded by that species of eucalypti called forest mahogany. Mr. Hodgkinson was unable to explore much of the country near the Bellengen river, as in a straight line of ten miles, he had to cross and recross the stream (little inferior in size to the Hastings river), no less than twelve times, on account of the steep, inaccessible forest banks, which formed tangents to the convex lands on either side. He was unable, for want of provisions, to explore the upper course of this "romantic river," which possibly may be found more available for the settler than its explorer supposed.

The Bellengen river is separated from the Clarence river by a bold range of abrupt lofty mountains heavily wooded to the summits, and of a "beautiful colour;" the country between the two rivers consists of verdant plains, grassy forests, steep, brushy ranges, and some rocky water-courses. The Bellengen range of mountains comes near to the sea coast, where it is 1,500 feet high—at eight or nine miles inland, upwards of 3,000 feet, and gradually increasing in altitude as it recedes from the ocean. This range appears to be the highest and least broken lateral offshoot from the great main chain which runs parallel to the Pacific, and it coincides with the Nundewar lateral range

of Sir T. Mitchell, which is given off on the interior or western side of the chain. Near the mouth of the Bellengen river a low range of hills extends along the coast, past the Solitary Islands; the country between these hills and the sea appears to be grassy forest land.

To the northward of Dudley county, through which the Nambucca and Bellengen rivers flow, are the counties of Clarence and Raleigh, divided by the Clarence river. The country available for grazing on the banks of the Clarence is much more extensive than that on the M'Leay river, as the mountains do not attain any great elevation near the coast, and the country is generally level, not only on the banks of the Clarence, but also near its tributaries. There are, consequently, numerous settlers and "squatters," with their flocks and herds, in this neighbourhood. Wool-drays can descend with comparative ease from the rich district on the table land opposite the sources of the Clarence river, to its navigable estuary. The brushes near the mouth of the river are interspersed with the beautiful variety of timber known as the "Moreton Bay pine."

RICHMOND COUNTY is watered by the Richmond river, which at its mouth has scenery resembling that at the embouche of the M'Leay river, namely, mangrove scrubs, tea tree, and swamp oak thickets, which cover the low flats near the mouth of the river; higher up the stream the alluvial land is diversified by brush abounding in cedar and pine, clumps of bangolo palms, reedy swamps, small rich plains, and highly wooded forest flats of great richness. The rest of the county, so far as is known, consists of very thickly timbered forest land of the greatest fertility. Mr. Hodgkinson thinks there are few rivers in New South Wales where so much good available land exists unbroken by densely wooded ranges and ravine. Of the next northern county, the Rous, watered by the Tweed, we know little more than that the hills are thickly wooded.

STANLEY COUNTY comprehends that part of New South Wales, lying between the parallels of 27° and 28° S. lat., bounded on the east by the Pacific, and on the west by the coast range of mountains which forms the dividing shed of the waters which flow towards the ocean, from those which flow into the interior towards the Darling river. Length, from north to south, sixty miles; breadth, sixty. The general aspect consists

of mountains and plains; the latter are very rich, and include Normanby, Laidley, Innes, and Letitia plains.

In lat. $28^{\circ} 2' 40''$ S., long. $152^{\circ} 24' 20''$ E. fifty-four miles south-west from Brisbane town, and sixty-four miles in a direct distance from Point Danger on the sea-coast, there is a remarkable gap in the great dividing mountain range, which was discovered by Mr. Cunningham in 1827, and subsequently explored in 1828, during an expedition which he made from the Limestone hills (now called Ipswich), on the Bremer river, for this very purpose. This important passage from the coast, through a formidable mountain barrier, commences near a valley, from whence there is an ascent through a low forest ridge at south, bending S.S.W. and S.W. through the first mile and-a-half. The acclivity is very gradual, and in another half mile the ridge takes a decided bend to the westward, its surface becomes wide, and presents an open patch of forest ground, timbered chiefly with oak and apple-trees. The ridge again narrows, but the declivity is progressively easy; patches of brush clothe its sides, as also the gullies falling from it, leaving the back-ground clear of wood, open, and grassy. At about two-and-a-half miles the ridge bends to the north of west, and immediately the summit of the pass appears, bounded on each side by stupendous heads, towering to the height of 2,000 feet, named Mounts Mitchell and Cordeaux. Here the ascent becomes steep for 400 yards, and a level surface is reached at the top of the pass or gap, clothed with a thick brush of plants common to the Brisbane river. From this point the waters may be seen falling westerly to Miller's valley beneath. The country contiguous to the eastern entrance of this important means of intercourse between the lower coast line and the upper table land of Darling and Canning downs, and Peel plains, is very beautiful. Mr. Cunningham passed a tract between the gap and Ipswich, apparently part of the 50,000 acres comprising Normanby plains, of which he says—"Nothing can possibly exceed the richness and mellowness of its fine black soil; and certainly there is not, in any explored part of New South Wales, a more beautiful subject for the pencil of the artist than the landscape presented to the traveller from the centre of Bainbrigge's plains, to which no description of mine can possibly do justice." Bremer river, on which Ipswich is built, at ten miles from its mouth,

has a tortuous course and a uniformity of breadth of thirty to thirty-five yards. Beyond Ipswich the river forms a fine natural basin of 100 yards wide; ledges of rocks fill the bed of the river, and separate the tidal salt water from the descending fresh mountain stream. At a few miles from the entrance of the gap, the rich flats and alluvial grounds are adorned with blooming vetch, called by botanists *swainsonia*, and with the *lotus Australis*, or "bird's-eye" trefoil, as also with a *geranium* and a *senecio*, frequently seen in Bathurst county. The grasses are chiefly those of the more southern districts of the colony. The "coral tree," with its splendid scarlet flowers, here grows to a height of thirty-five feet, with a smooth trunk, but thorny branches.

Brisbane, the county town, or *the settlement*, as it is still commonly called, is situated on an elevated ridge of considerable extent, on the north or left bank of Brisbane river, about twenty-five miles from its mouth. This town was founded as a penal settlement, and many substantial buildings were erected by convict labour, which, when the district was thrown open for free settlers in 1842, would, it was supposed, form the nucleus for a large population. These reasonable hopes were, however, frustrated by the pursuance of the same mistaken policy which, in so many other instances, has retarded the progress of the colony, £100 an acre being fixed as the minimum price of building allotments in the town of Brisbane. On the other side of the river, which is here nearly a quarter of a mile in breadth, building allotments were sold at a somewhat lower minimum price, and hence arose another small town, called South Brisbane, in contradistinction to the older settlement. A third town was established, by private speculation, at Kangaroo Point, a peninsula formed by a sharp bend of the river, situated exactly opposite to Brisbane town. This tract being regarded merely as country land, was disposable at the government land sales, at a minimum price of not less than a pound an acre, at little more than which it was purchased by Mr. (now Sir Evan) Mackenzie, and subdivided into building allotments, for those who wished to have a fixed place of residence in the neighbourhood; but could not afford, or did not choose to pay, £100 an acre for a building allotment on the other side of the river.* The population, which, united, might have formed one

* Cooksland—Dr. Lang.

respectable and flourishing town, is now scattered among three insignificant places, a consequence which has been the direct result of the system whose chief end was professedly *concentration*. According to Dr. Lang, there is much land of very inferior quality near Brisbane town, on both sides of the river, but particularly on the south side; the tract from Brisbane to Ipswich, or the Limestone hills, situated at the head of the navigation of the Bremer, a distance of twenty-five miles by land, and fifty by the two rivers, being absolutely sterile, with the exception of a small plain of a few thousand acres in extent, called Cowper's plains, about ten miles from Brisbane. In another place, however, Dr. Lang says, that for some distance above Brisbane the river is considerably wider than at the settlement, and where the banks are high and rocky, as is often the case in the lower part of its course, there is generally a considerable extent of level alluvial land on the opposite side, constituting what are called the *brushes*, in which the soil is of the richest description, and the vegetation much more varied and vigorous than on the forest-land, beyond the reach of floods. These flats are found along the whole course of the main river and its various tributaries, and in the higher parts of its course are both more frequent and more extensive than in the lower. Ipswich, or Limestone, is a rising town, well situated at the head of the navigation of the Bremer river, and on the direct route to the Darling downs, by Cunningham's gap. From Ipswich the Bremer pursues a tortuous course, between steep banks, for about twelve miles, to the Brisbane river. A small steamer now plies between the towns of Ipswich and Brisbane. The Bremer is subject to floods, and has been known to rise fifty-three feet above its ordinary level; but the Brisbane being considerably wider, the water, in times of inundation, escapes much more freely, and the floods on that river are, consequently, not nearly so high. Limestone plains, in the immediate vicinity of Ipswich, are a tract of land almost destitute of timber, of the richest and most fertile black mould. The distance to the foot of the mountains is only thirty-eight miles, and quite level throughout; at eighteen miles from Ipswich there are other plains, similar to those at Limestone, called Normanby plains, containing an area of from 40,000 to 50,000 acres.

The whole country bounded by Moreton

bay—a distance of about fifty miles from south to north—is well adapted for grazing and agricultural farming; the soil around the Glasshouses (peaked mountains, so called by Captain Cook, when he discovered and named the bay), is formed of decomposed lava, and very fertile. The indigenous timber is of great value—the *auracaria Cunninghami* or Moreton bay pine, and the *auracaria Bidwellia* or the Bunya-Bunya tree, have been already mentioned. The mulberry tree grows very luxuriantly. With regard to the adaptation of this locality to the cultivation of the vine, there appears much difference of opinion; but the periodical rains of January and February, coming as they do, just at the season when the fruit needs maturing by a hot sun, seems a great obstacle. The climate and soil appear well suited to the cultivation of the sugar-cane, cotton, arrow-root, tobacco, indigo, and other tropical products; and, according to Dr. Lang, is also admirably adapted for the production of every species of European grain, as well as of those peculiar to warmer climates; for as vegetation goes on without interruption all the year round, the farmer has only to select, for the growth of any description of grain, the peculiar season that will ensure the exact temperature required to bring it to maturity; the barley harvest, being the hardiest grain, comes immediately after the colonial winter, the wheat harvest at the commencement of summer, and the maize harvest so late as to give that inter-tropical grain the full benefit of the heat of summer. This latter crop is a never-failing one at Moreton Bay, yielding, on alluvial land, at the rate of eighty bushels an acre. The English potato, and the Indian or sweet potato, are both cultivated successfully*. The latter is very prolific, and is grown near Brisbane to the weight of eighteen, and even twenty-three pounds each. Coal is found in the neighbourhood of the Brisbane; and the fisheries of the extensive bay and coast may be made very profitable. By recent accounts, it appears that the colonists at Brisbane have commenced capturing the Yungan, called also

* The summer heat of Moreton Bay will, I think, prevent the extensive employment of European agricultural labour at this station; but under a well devised system, and with due encouragement, a large and valuable class of Chinese immigrants might be induced to settle at Moreton Bay, where they would soon become successful cultivators of sugar, cotton, mulberries for silk, tobacco, and other products suited to the soil and climate. The Chinese are now

the dugong or sea-pig of Moreton bay, for the purpose of extracting the oil from the animal; the oil procured in this way is highly spoken of, being remarkably pure and clear; about five gallons is obtained from each animal. The blacks are very expert in harpooning these animals, and they are passionately fond of the flesh, preferring it to any other kind of food.

The chief *Eminences* in Stanley county are Mounts Brisbane, Hallen, Forbes, Frazer, Edwards, Sampson, Cross, Melbourne, and Stephenson, Frenchplay peak, Tenthill, and D'Aguilar's range. *Rivers*.—Brisbane, Bremer, Stanley, Logan, Teviot, Lockyer, and Pumicestone. *Creeks*.—Coyar, Graham, Franklin, Yarril, and Downshire. *Towns*.—Brisbane (chief), on the Brisbane river; and Ipswich, on the Bremer river. *Harbour*.—The fine haven of Moreton bay; the adjacent islands of Moreton, Stradbroke, and Peel, belong to Stanley county.

Of the three islands which run nearly parallel to the coast, and form the haven termed Moreton's bay, Stradbroke, the most southern island, is thirty miles in length, and five in breadth; at its southern extremity is a sand-spit, parallel to the main land for twelve miles. North of Stradbroke is Moreton island, with a navigable channel between the two of a mile in width. Moreton island runs north for about twenty miles, with a breadth of three miles. The third or most northern is Bribie's island, termed Yareen by the natives; it is seventeen miles long, by two to three broad. There is a channel of eight miles wide, with five to six fathoms water, between Moreton and Bribie islands. These three islands are stated by Dr. Lang to be hopelessly sterile to seaward. Moreton bay, throughout its whole extent of sixty miles long by twenty miles wide, is studded with islands of various sizes, and at its southern extremity it gradually narrows to the appearance of a mere river.

CAVENDISH COUNTY, situated to the northwest of Stanley county, is divided on the south from Churchill county by Lockyer's creek, which is surrounded by extensive plains. Dr. Leichardt says: "I have seen

purchasing land at Singapore, and cultivating it with their usual skill; thousands would emigrate from Amoy, if the local government of Australia gave them due encouragement. The table land above Moreton bay may probably be more adapted for European outdoor labour, but I certainly doubt the eligibility of Stanley county as a residence for the distressed needlewomen of London.

some forty miles more of the district, and the more I see, the more I feel convinced that it is eminently fit for small settlers." Ridges of small elevation in this county, contain small concretions of carbonate of lime, which are equally found on Darling downs and on Liverpool plains, indicating a fertile country. Besides this description of soil, there are many flats between the primitive mountain ranges and the ridges where a bed of clay lies generally one-and-a-half to three feet below the surface. The forest ground resembles, at present, one uninterrupted oat or rye-field in harvest. *Antistheria Australis*, which grows from three to four feet high, is the predominant grass, and is burnt off from time to time, the ashes form a good manure by which the soil is enriched, the tuft enlarged, and a younger and more nutritious grass formed.

COMMISSIONERS' DISTRICTS, OR SQUATTING STATIONS.—Irrespective of the foregoing counties of New South Wales, there is a large extent of the colony divided into what are officially termed commissioners' districts, or "squatting stations," where the owners of sheep, cattle, and horses are authorized, by licences from the colonial government, to depasture their flocks and herds over certain tracts. From time to time these squatting stations are being converted into *counties*, as population increases and land is in demand for purchase. In the year 1848, the squatting stations in the Sydney portion of New South Wales were—

Districts.	Chief Places.
Bligh	Dubbo.
Clarence River	Grafton.
Darling Downs	Warwick.
Lachlan	Gundegai.
Liverpool Plains. . . .	Tamworth.
M'Leay River	Kempsey.
Maneroo	Cressbrook.
Murrumbidgee	Deniliquin.
New England.	Armidale.
Wellington	Molong.

To begin with the southern districts of the colony. The Maneroo has been described in Auckland county.

The *Murrumbidgee squatting district* is situated between the left bank of the Murrumbidgee river on the north, and the right bank of the Murray river on the south; on the east it is conterminous with the Maneroo district. It is one of the largest and finest tracts in New South Wales; has extensive plains and swelling uplands, thinly

wooded, which increase in elevation towards the Australian Alps. The most prominent *eminences* are—Mounts Trafalgar, Battery, Friday, Aikin, Mingeroo, Majonbury, Janil, Talbingo, Kengal, and the Snowy Mountains, where the Murrumbidgee and Murray rivers have their source. The district is well watered by two of the largest rivers in New South Wales, and also by the Doomut or Tumut, Burnett's, and the Coodrabadgee; by the *creeks* Tingella, Yewen-Yewen, Nackie-Nackie, Aidelong, &c. Hamilton plains, on the south bank of the Murrumbidgee and Camden forest, watered by Tingella creek, are extensive and valuable tracts. Albury, advantageously placed on the Murray river, is the post town of the district. It is in the high road from Sydney to Melbourne, through Goulbourn, Yass, and Gundegai. This last-named town, 250 miles from Sydney, is situated on one of the flats of the Murrumbidgee, which is here as broad as the river Clyde at Glasgow; but, like all Australian rivers, subject to expansion from floods. On one occasion, in October, 1844, the Murrumbidgee rose more than forty feet above its ordinary level, and covered the parlour of the inn at Gundegai to the depth of four feet. The Murrumbidgee is here fringed with swamp oaks, which are not found on any river farther south. The banks and districts for many miles above Gundegai are occupied as grazing stations, and at intervals by small farmers.

Lachlan squatting district is situated between the right bank of the Murrumbidgee river, and the left bank of the Lachlan river. This large division of the colony consists chiefly of a series of undulations, with extensive plateaux, such as the Euryalean (between Mount Brogden and Jones hills), and Molle plains, on the south bank of the Lachlan. There are several *lakes*; the principal are—Quawingame, near the confluence of the Lachlan and Murrumbidgee rivers; Campbell's, Goorungutty, and Cudjallogong, or Regent's lake. The chief *eminences* are—Taylor's, Peel's, Macquarie's (or Coccaparra), Yerraraser, Goulbourn's ranges, Mounts Stewart, Gill, Watts, Myarong, Berabidgal, Matta, or Mannar (hill), Maude, Garrow, Meyrick, Balloon, Moriatta, Portesse, and Byng. The *rivers* are the Lachlan, Murrumbidgee, Yass, and Boorowa.

Sir T. Mitchell, speaking of the country near Jugion creek, on the right bank of the Murrumbidgee, on the road which leads towards Sydney, says—"The scenery at

various points of the river seen this day was very beautiful; its chief features consisting of noble pieces of water, umbrageous woods, flowering meadows, enlivened by those objects so essential to the harmony of landscape—cattle of every hue. Each meadow was already covered with the lowing herds, for which it seemed to be prepared." The traces of the industry of man are obvious in fences and substantial wooden houses, with their smoking chimneys, built in the most inviting parts of each cattle run. This region is thinly wooded with the gigantic Yarra eucalyptus, and it is one of the finest pastoral districts in the colony. Nothing definite is known of the Lower Darling River district, but the country appears to deteriorate the further it is explored westward of the great coast range. On that portion of the Lower Darling which is bounded by the Lachlan river, there is good pasturage and several stock stations.

Wellington district.—Adjacent to the counties of Wellington and Bathurst, and between the Lachlan and the Macquarie rivers, is a very fertile tract. The *plains* Wellington, Cannil, Baird, and Gullerong afford sweet pasturage. The *eminences* are Harvey's, Croker's, and New Year ranges, Mounts Coulambals, Laidley, Bugamel, Margang-Nangar, Amyot or Camerberdong, Melville, Allan or Wolga, Picor Talga, Hurds, Paccalang, Gundobillong, and Warranary. *Rivers* Lachlan, Macquarie, Byrnes, Kalungalungaguy, Yamerunna, Belabula, Bell, Molle, Mary, Elizabeth, Bogan or New Year creek, and several other creeks.

Bligh squatting district is bounded on one side by the Macquarie river, and on the north by the Liverpool range, as it extends to Warrabungle range. The pasturage is excellent, and it is well watered. The chief *eminences* are Mount Harris and Warrabungle or Arbuthnot's range, which comprises Loadstone hill, Mount Harrison, and Vernon's Peak.

Liverpool Plains squatting district (native name *Corborn Comleroy*) is bounded on the south by the Liverpool or great dividing coast range, on the east by the western extremity of the same great dividing range; on the north and west the boundaries are indefinite. This is the finest pastoral district in New South Wales; situated between two parallel mountain ranges, it is traversed at irregular intervals by narrow belts of forest which divide the plains into a series of natural parallelograms, and excellently

watered by the numerous rivers and creeks which run eastward and westward, and are the source of nearly all the streams to the northward of Sydney. The chief *eminences* are the Warrabungle, or the Arbuthnot range, which divide the Liverpool plains from Bligh district; the Great Liverpool range, the Green mountains, Vansittart hills, Pandora's Pass, East Bluff, Mooan, Mac Arthur, Tereil, Murulla, Temi, Spear range, Breeci, Dinbundie, Forbes, Turiel, Shirley, Nundawar or Hardwick's range, Mount Riddell, Albuera, Drummond range, Frazer, Lindesay, Purren Virden, Bullinbulla, and Gulligal. The principal *rivers* are the Peel, Cockburn, Bireboola, Mooriloo, Bowen, Yorke, Turra-beile, Parry, Nammoy, Goonore, Gaora, Coradilla, Mulnuerindie, Maules, Coagi, Buddle, Horton, Kareen, Bombelli, Gwydir, and Darling. The *creeks* are those of Carlingoha, Purreonville, Weeves, Ogunbill, Moonbi, Calingorady, Moowar creeks; and the Lobster, Meadow, Welcome, Rocket, Bombelli, Limejuice, Pelican, and Roderigo ponds.

The Australian Agricultural Company hold within the boundaries of this district 562,898 acres out of their grant of 1,000,000 acres, the remainder, consisting of 437,109 acres, are, as previously stated, in Gloucester county.

The Peel river portion of the Australian Agricultural Company's lands, consisting of 313,298 acres, commences at the source of the Peel river, immediately under the great range, and is bounded on the east and north by that river, and on the west and south by marked lines to include the above area. These lands, from their elevation above the sea, and being beyond the genial effects of the sea breeze, are subjected to greater extremes of both cold and heat than the Port Stephen's grant, and are occasionally liable to frosts, but the soils in the valleys are rich and fertile in the extreme, and although crops of maize and tobacco cannot be depended upon, wheat and potatoes may, it is considered, be grown to any extent.

The hills are everywhere richly covered with a tall luxuriant grass, but comparatively bare of timber, not affording in this respect the same facilities as the land at Port Stephens. The Peel river forms, for some miles, the northern and eastern boundary of this portion of the company's possession, and streams of minor importance run through other parts of them.

The remaining grant of the Company, a

parallelogram of 249,600 acres, is not more than fifteen miles from the western boundary of the Peel's river grant, and embraces the greater portion of the flats or levels which were originally a fresh-water lake, since filled in by the washings from the surrounding hills, and consequently containing the richest alluvial soils of very considerable depth; the pasturage on the plains is decidedly herbaceous, on which stock of every description thrive remarkably well: the hills are coated with the same character of grass as that on the hills of the Peel's River tract, differing only from the grass on the eastern side of the Barrier range, inasmuch as it is more rank in growth, and more fattening in quality. The numerous streams that intersect and are comprised within the boundary lines of this portion, on reaching the plains become absorbed in the soils, so that they are somewhat deficient in surface water, which is nevertheless always attainable with ease and certainty at five-and-twenty feet below the surface; and Artesian wells might be here introduced with incalculable advantage.

On all the lands of the company large sums of money have been expended by the company in making roads and bridges, and in the erection of houses and buildings.

The company has also large flocks of sheep—herds of cattle and horses, depasturing on their several locations, the breeds of which are of the purest and most valued kinds, sent originally from this country, France, and Germany, at very great expense, and selected with considerable care and judgment.

M'Leay squatting district is divided by the Macquarie river on the south from Macquarie county; on the west it is bounded by New England district; on the north by Clarence River district; on the east by the ocean. There is a large extent of available land along the banks of the M'Leay river, on whose banks, as before stated, Kempsey, the post-town, is situated. The soft slaty ranges, more than usually disintegrated and decomposed, are very general in the basin of the M'Leay river, and being converted into a rich loose soil, have a comparatively better grassy covering than the other formations; they are not, in general, thickly wooded, and, it is supposed, would be pre-eminently favourable for the growth of the vine, which seems to delight in earth mixed with, or formed from decomposed black clay slate, as is observable on the mountains near

the Rhine, and at Constantia, Cape of Good Hope. At Dongai creek, near the M'Leay river, there are several limestone caves full of stalactites, of singular conformation. Proceeding from Dongai creek, up the banks of the M'Leay river, there are a great number of squatting stations belonging mostly to retired officers. The country they occupy is abundantly watered, independently of the river, by numerous permanent chains of ponds and water-courses. The grass is good, but the country, especially on the north bank, soon becomes elevated, the ranges rising one beyond the other, in endless succession, covered with dense brushy forest, and intersected by ravines and water-gullies. There are scattered sheep stations on the Upper M'Leay and Apsley river; but the rugged mountainous country intervening between them and the Lower M'Leay, prevents all communication between the settlers on either side. Mr. Ralfe, the government surveyor, has discovered a passage over the mountains (some of which are 6,000 feet above the sea) from the table-land of New England, and a road has now been constructed to Port Macquarie, for wool-drays, so that the staple produce is conveyed in the weekly steamers to Sydney. The Solitary Islands are off the sea-coast.

Rivers.—M'Leay, Nambucca, and Bel-
lengen.

New England squatting district, bounded on the east by a line from the confluence of the Barnard and Manning rivers to the top of Mount Seaview, thence by a line to the top of Wirrikimbie mountain, and thence by a line north by compass from Wirrikimbie, dividing the district from Macquarie county, and from the M'Leay and Clarence River districts; on the north, by a line due west, so as to intersect the top of Mount Girard, near the head of the north branch of the Clarence river, and dividing this from the Darling Downs district; on the west by the western extremity of the great dividing range, so as to include the table land; and on the south by the Manning river, which forms the north boundary of Gloucester county. This elevated district is one of the best sheep pastures in Australia. Mr. Patison remarks, in his work on New South Wales, that nothing will astonish the traveller in the bush more than the rapidity with which villages and settlements spring into existence; a court-house, inn, and store, are the first attempts in a bush township. In the centre of this squatting district is Arma-

dale, which, in 1842, had solely a police-station; in 1848-9, it had two places of worship, five inns, a steam-mill, stores, tradesmen of all kinds, and was a thriving town, with a weekly post to Sydney.

Eminences.—Ben Lomond, Mitchell, Galligal, Bullimbulla, Basaltic rock, Wirrikimbie, Mount Seaview, Sugarloaf or Chandler's peak, and the Blue mountains.

Rivers.—Barnard, Apsley, Hastings, M'Leay, Croker, Clarence, Severn, Burrell, Anderson, Dumaresque, Boyd, Mitchell, Man's, and various creeks and ponds.

Clarence River squatting district is bounded on the south by the ranges which form the basin of the Clarence river, on the south side of that river; on the west by the New England district; on the north by the ranges forming the basin of the Brisbane, and the Logan on the south side of these rivers; and on the east by the sea-coast. I do not know the area of this district, which is mountainous. The principal *eminences* are, Mounts Lindsay (5,700 feet), Warning (3,300 feet), Hughes, Wohman, Coke, King William, Ballow, and Barney. It is watered by the Boyd, Clarence, Tweed, Richmond, Brunswick, Logan, Teviot, and Albert *rivers*; and by Urara, Myrtle, Loadstone, Deep, Reynolds, and Yarril *creeks*.

The following is an extract from a report of Mr. Commissioner Fry, commissioner of crown lands in the Clarence district, and a magistrate of the territory, drawn up in June, 1846:—

"The plains on the banks of the Clarence river are of various sizes, many of them extending along the river for miles, the soil being a deep dark alluvial deposit on a substratum of clay, covered at top by a layer of vegetable decomposition, the accumulation of ages, and so thinly timbered that isolated acres may be found unincumbered by a single tree. The astonishing vegetation with which they are clothed is almost inconceivable, such indeed as I have never witnessed elsewhere save on the equally favoured regions of the Richmond, a river forty miles to the northward of the Clarence. It is impossible to imagine a country more worthy of having bestowed upon it the labour of the husbandman, or one more likely to remunerate him for his toil than the localities to which I refer, as they are remarkable, not alone for the excellence of the land, but for being placed under a climate than which none can be more conducive to the process of vegetation. An almost complete realization of Fenelon's conception with reference to Calypso's isle is exhibited in the climate of the Clarence, as, without any degree of hyperbole, a perpetual spring may be said to prevail during the entire year, for so mild are the seasons that vegetation remains unchecked even in the midst of the so-called winter. Rain is abundant, so much so as to give rise to the opinion that the district is unsuited for pastoral purposes, at least so far as sheep are

concerned. Frost is very unfrequent, and never intense, as may be inferred from its geographical position. The heat in summer is considerable, but an excess of two or three days is almost invariably succeeded by thunder showers which for a time render cool and invigorating the air, occasionally causing an extraordinary rapid change of temperature, the thermometer having been frequently known to vary no less than forty degrees in the space of twelve hours. This sudden caprice of temperature is however not in the least creative of unhealthiness; on the contrary, I am satisfied there is no part of New South Wales, however justly it may be famed for the salubrity of its climate, which is more conducive to the health of the human body than the district of the Clarence river; indeed most others must be confessed to yield to it in this respect, inasmuch as the never-fading mantle of green in which it is perpetually clothed, shields its inhabitants from the opthalmic diseases so prevalent in other parts of the colony. Were it necessary to adduce any corroboration of this truth, I need only refer to the unsuccessful effort of a medical practitioner to establish himself in the district, who, though eminent both for professional talent and amenity of manner, was obliged to abandon the undertaking, after a fruitless attempt protracted for upwards of two years, his failure solely arising from the almost entire absence of disease, as it cannot be imagined that a population amounting to nearly 1,000 souls, and possessed of 150,000 sheep and 30,000 cattle, would be unable sufficiently to remunerate him were his services required. On the whole, a four years' residence in the district has confirmed me in the opinion, that no country ever came from the hands of its Creator more eminently qualified to be the abode of a thriving and numerous population, than the one of which I have been speaking; and in forming this estimate I have been uninfluenced either by prejudice or by interest, being no way concerned with it save in that arising from my official capacity."

From the thirtieth degree of latitude, there are tidal rivers along the coast to the northward, every forty miles; all perennial streams.

Canning Downs, to the westward of Churchill and Buller counties, are several miles in length, and two to three miles in breadth; on each side of the plains there are ranges of middling height—now a chain of cones, now flat-topped mountains, covered with brush, then long-backed hills sharply cut at their ends. The soil of the downs is black, and yet mild, with many white concretions of carbonate of lime; the vegetation is quite different from that of the forest ground on the other side of the coast range, and the grasses are more various, but they do not here exclusively occupy the ground; they grow, says Leichardt, more sociably in small communities, together, separated by succulent herbs, particularly composites; the creeks are deeply cut, with steep banks covered with reeds. This celebrated explorer of the resources of New South Wales, says: that the finest mountain country he has seen in the colony, is the eastern side of

the "gap," through which the road passes from the Brisbane to the southern parts of Canning downs. Sunny ranges covered with fine grass and open forest, ascend pretty rapidly to the pass. The coast range forms an amphitheatre of dark, steep mountains; a waterfall rushes over a precipice 300 feet high, into a rocky valley, which one might take for the crater of an extinct volcano, if the surrounding rocks warranted such a supposition. Bold isolated mountains appear in the distance, in their various tints of blue, during sunset "dimming through a purple mist." Both sides of the mountain have some brushes, particularly the western side, in which many of the trees of the Bunya brushes reappear. This is the most western point in which that beautiful palm, the *aracauria Cunninghamia*, has been found; the *Seaforthia* palm is frequent and high. The rosewood acacia is abundant; it has a very agreeable violet scent. The "bottle tree," which is found in various parts of tropical Australia, is seen here; it swells slightly four to five feet high, then tapers rapidly to a small diameter, the whole height about forty feet; foliage thin, crown scanty, leaves lanceolate, and of a greyish green. The Canning and Peel downs, which by some are considered as part of the Darling downs, extend northward to lat. $26^{\circ} 50'$, six miles beyond Jimba creek. Their length is estimated thirty to forty miles; they slope gradually from the great eastern range down to the Condamine.

Darling Downs are in length about 120 miles, from north to south, with an average breadth of fifty miles, bounded on the south by a line extending due west, so as to intersect the top of Mount Gerard, which is near the head of the north branch of the Clarence river, and dividing this from the New England district, on the east by the range dividing the east and west waters, separating this from the Clarence River district and from Stanley county; on the north and west the boundaries are undefined. The plains of this extensive district are the Darling downs, Canning downs, Cecil, Peel, and Waterloo plains. The chief *eminences* are Mount Parker, M'Leay, and Herries' ranges, mounts Sturt, Mitchell, Logan, and Hay peak. It is well watered by the Condamine, Glen, Dumaresque, Boyne, Macintyre, Myall, and other streams.

The Darling downs were discovered by the late Allan Cunningham, in 1827, during the course of an expedition suggested by

then surveyor-general Oxley. Cunningham left the Upper Hunter's river on 30th April, 1827, with six servants and eleven horses, and previous to his departure, expressed to me his conviction, that the discovery of a valuable country would be the reward of his labours. He crossed the dividing range at an elevation of 3,080 feet above the sea, skirted the Liverpool plains at an elevation of 840 feet, through a forest country; and about forty miles to the northward of $31^{\circ} 2'$ S. lat., $150^{\circ} 30'$ E., found that the country had gradually risen to 1,900 feet. After crossing the parallel of 30° , and passing a poor region, the adventurous explorer descended to "a beautiful and well-watered valley, affording abundance of pasturage." This valley terminated sixteen miles farther north, on a stream (the Gwydir) flowing north-west, in $29^{\circ} 51'$ lat., 911 feet above the sea. Proceeding northward through a comparatively inferior tract, he came in lat. 29° , long. $150^{\circ} 40'$ on a river running westerly, eighty yards wide, and very deep, 840 feet above the sea, and 170 miles from the coast. Here the land was good. A country, then arid, on account of the existing drought, was next explored in a north-easterly direction for eighty miles, and eventually led to a clear, pastoral region, which has since proved so valuable. Deep ponds, nourished by streams from the islands immediately to the eastward, extend along its central lower flats, which being permanently watered furnish an almost inexhaustible range of cattle pasture at all seasons. From these central grounds rise downs of a rich, black, dry soil, and of a very ample surface; they furnish abundance of grass, are conveniently watered, and, being above the reach of the floods which take place on the flats during seasons of rain, are well adapted for sheep stations. Some hills are connected laterally with the bold outline of the stupendous-looking coast-line range; they are clothed from head to foot with dense underwood. The greater part of the downs is composed of hill and dale, woodland and plain, forming a most beautifully diversified landscape.

There is communication with the sea-coast from this table land by Cunningham's gap, through Stanley county, to Moreton bay. The mean elevation of the Darling downs is 1,800 to 2,000 feet above the sea; but Mount Mitchell, the highest peak of the adjacent range, is 4,100 feet above the sea. From the Condamine river the country rises very gently—almost imperceptibly, till the

road passes between two hills or ranges, where basaltic rock appears, and very extensive shallow valleys or plains, generally intersected by a creek overgrown with reeds and high grass. Here and there the grass tree is seen, either single or in groups and groves, one foot or more in diameter, and eight to ten feet high. The ranges which border the plains are covered with box-wood; with a gum-tree, called the Moreton Bay ash; and with other trees; but all very scattered. The forest becomes denser on approaching the eastern slopes. Dr. Leichardt thinks there is no equal to the Darling downs for sheep rearing, the mutton being fat and tender, and the wool excellent. One shepherd can here look after two to three thousand sheep; whereas, in other districts, three or four shepherds would be requisite for the care of a similar number. They are traversed, at moderate distances from each other, by streams or creeks, rising in the lofty coast range, and running westward to the Condamine river. The usual extent of a sheep run or station is twenty miles in length, by six miles in breadth, or three miles on each side of one of these creeks; one station, therefore, contains 120 square miles = 76,800 acres. Dr. Lang says, that on the east side of the range towards the coast, the sheep and cattle stations are not unfrequently of this extent. Large plains stretch along the Condamine river, some fifty miles long by twenty-five miles broad—true savannahs, in the centre of which may be seen the sharp line of the horizon, as on the ocean. North-west of the Condamine, on the Cogoon river, are the valuable Fitzroy downs, with "mount Abundance;" and still further north there is an immense extent of pastoral country, discovered by Mitchell, which he states to be of greater extent than the whole of the present squatting districts; and that after his exploring party crossed the Darling river, they never suffered from heat, and had no want of water. There is excellent pasturage in the tracts watered by the Cogoon, Maranoa, Claude, Belyando, Warrego, Nogoa, and other rivers, which flow from the south side of the Plutonic cones—Pluto, Hutton, and Playfair; but the country on the Victoria river is better watered than any other part of Australia seen by Sir Thomas Mitchell. The soil is of rich clay, and covered with luxuriant pasturage. To the north-east, after passing the great plains of the Condamine, Leichardt entered on a

country which was alternately covered with fine open forest land, well grassed, and fit for cattle and horse breeding, and with long stretches of almost impassable brigalow scrub. Along the Dawson river or creek, in 26° S. lat., fine flats extend along its banks and open ridges, with sound ground some miles off the river. At Palm-tree creek, in 25° 34' S. lat., there are rich flats, fine ridges, and a plentiful supply of water. Following up this creek is a flat table land, where the waters are turned to the south-west. Proceeding towards Robinson's river or creek, the whole country is openly timbered, the ridges at the upper part of the creek, in part, covered with silvered-leaf iron bark, and well adapted for sheep. Fine flats extend along its bank, when first met with, in 25° 28' S. lat. At Zamia creek, in 24° 54' S. lat., there is a flat country of very great extent, almost unbounded by any rise towards the north-east. The creek is accompanied by small flats and thick scrub; but the flats extend more and more, and the scrub recedes as it approaches the large open country, which appears thinly timbered. The reader may follow, with his eye, these tracts of country, along the routes of Mitchell and Leichardt, in the accompanying map of New South Wales. A more detailed account of the new regions they explored is given at pp. 388 to 393.

The country north of Stanley county, not yet divided into counties, is marked by a very high range of sienite, broken through by basaltic rock, dividing Stanley county from the Wide Bay district. To the northward of the 27th parallel is the Bunya-Bunya country, so called from a gigantic tree of that name, with an umbrella-like head, which overtowers all the trees of the brush, and at certain seasons (about every three years) supplies the aborigines with a very palatable food, which they travel a distance of two or three hundred miles, periodically, to obtain. Some of these giants of vegetation, which rise to 150 feet, as straight as a gun barrel, have a circumference of twenty feet, at six feet elevation from the ground; the cones, which are about one foot long, and three-quarters in diameter, somewhat like a pine-apple, contain forty to fifty scales, beneath which a kernel is found, which Leichardt says, is "delicious eating," and that it is difficult to cease eating them. These trees, which look like "pillars of the blue vault of heaven," extend over a brush about fifty miles in length, by ten in breadth.

The "Glasshouses," in this neighbourhood, so named by captain Cook, rise out of low ranges—some like needles, others like castles—the highest (Biroa or Birwah) is about 1,000 feet high, composed of rock entirely different from the surrounding mountains. Dr. Leichardt, who had seen similar mountain features in the neighbourhood of *Clermont-Ferrand*, in Auvergne, considers these isolated cones to consist of what geologists call rockdomite. The Biroa is extremely steep, and its sides almost naked rock; but wherever a hollow or depression has allowed the accumulation of some soil and of moisture, a rich vegetation appears, single but full high bushes of a broad-leaved boronia, a dendrobium with red blossoms, and other flowers. Leichardt thinks that the sea once heaved against these mountains, which are surrounded by sandstone ridges of a coarse grain. The grass-tree (*Xanthorrhaceæ*) grows in thousands (except on Darling downs, or other places possessing a very rich, black, mild soil containing much carbonate of lime, this is generally a sign of a poor or thin soil); casuarina, the apple, and other trees, abound in the district. The Boyne river, which traverses the region east of Wide bay, was discovered by Mr. Henry Stuart Russell. He found, after leaving Jimba creek (see map of New South Wales), that the whole character of the country alters—instead of the wide-spreading plains upon the Darling downs, there is a fine undulating country thickly timbered, and covered with the most luxuriant grass; the ridges are chiefly granite. The bed of the Boyne river is 1,500 feet above the sea. On the first day's journey down the river, the explorers passed over some lovely country; nothing could be more beautiful and luxuriant than the valleys; the foliage of all the trees, amongst which is the conspicuous wide-spreading "apple tree," appeared fresher and brighter than any Mr. Russell had seen in any other part of Australia. Droughts, they found, were unknown; the soil, dark and rich; the grass, chiefly oaten, which is the most fattening; the ridges high (always the sign of good sheep-ground,) and well wooded, chiefly with the broad-leaved iron bark. On the second day's journey down the Boyne, many streams joined it from the east and west; the land became more mountainous, and the valleys richer and more fertile. The third day the travellers stopped at Barrendowan, "a beautiful spot," fifty miles in a direct

north line from Jimba. On the fourth day they came upon a full flowing stream from the eastward, which they called the Stuart. The journey was continued during sixteen days, for 300 miles along the banks of the Boyne—though the distance from Jimba was not supposed to be more than 150 miles. Where Mr. Russell's journey terminated, the climate was too warm for the growth of wool; but the country was well adapted for the cultivation of rice, sugar, and other tropical products. On the upper part of the river Mr. Russell says: "there is an expanse of the finest country for sheep and cattle, and also for the cultivation of European productions."

Irrespective of the arrangement of counties and districts, the colony is divided into three dioceses, viz., Sydney, Newcastle, and Melbourne; the latter includes the whole of the Victoria or Port Phillip district; Newcastle comprises the seven northern counties of New South Wales, viz., Northumberland, Gloucester, Hunter, Durham, Brisbane, Bligh, and Phillip counties; the Sydney diocese comprises all the remainder of the territory not included in either of the two before-mentioned dioceses. The Episcopalian churches and chapels in New South Wales, scattered throughout the colony, are in number—of stone, 28; of brick, 30; of wood, 12. The Roman catholic chapels—of stone, 28; of brick, 10; of wood, 6. The Presbyterians are divided into the presbytery of Campbelltown (three chapels), of Maitland (five chapels), of Melbourne (five chapels), of Sydney (five chapels and two temporary), and of Windsor (three chapels). The Wesleyan methodists have forty-two chapels in the different counties of New South Wales.

I have endeavoured to delineate the leading features of this noble colony, according to its several divisions; but as may naturally be supposed, a region that extends for more than one thousand miles along the shores of the Pacific, viz., from Cape Howe to Hervey's bay, and upwards of five hundred miles inland, i.e. from the ocean to the river Darling, and whose colonization is, comparatively speaking, the work of yesterday, can yet be but partially known. If we view New South Wales as a region ten times the size of England, with a climate unsurpassed for salubrity, and peculiarly adapted for the Anglo-Saxon race, with a table-land of

nearly half-a-million square miles, supported for a thousand miles by gigantic mountain buttresses of four to six thousand feet high: this table land for the most part throughout the whole year covered with the most nutritious herbage, admirably adapted for the food of sheep and cattle, and intersected by a network of streams; the mountains clothed with useful timber, the valleys, where cultivated, yielding fifty to one hundred-fold of grain, the coast line indented with secure havens, and the ocean, the lakes, and the rivers teeming with fish—some idea may be formed of the importance of this valuable section of the British empire.

The limited extent of which we have as yet availed ourselves of the blessings thus

vouchsafed to England, will be best manifested by shewing, in a tabular form, the area of each county and district, the small number of acres cultivated, the quantity of live stock, and the number of acres to each individual in each county and district. It will be observed from the annexed table, that in the counties there are from five hundred to *five thousand acres to each inhabitant*; in the districts not yet formed into counties, the range is from *five thousand to ten thousand acres for each European resident*. The total number of inhabitants on about 96,909,364 acres, is 154,515, which gives for the portion of New South Wales included in these details, 628 acres for each Anglo-Saxon at present dwelling in the land:—

Counties and Districts in New South Wales, exclusive of Port Phillip.	English acres, in each about	White Popula- tion in 1846.	No. of acres to each inhabi- tant, about	Acres culti- vated, 1848.	Houses in each, 1846.	Number of Live Stock in 1848.			
						Horses.	Horned Cattle.	Sheep.	Swine.
COUNTIES :—									
Argyle	1,248,600	5,000	250	4,927	583	3,652	22,831	260,708	1,285
Auckland	1,536,000	1,000	1,400	—	100	—	—	—	—
Bathurst	1,190,400	4,391	297	4,656	670	3,614	18,339	266,369	1,021
Bligh	1,070,120	598	2,140	403	65	1,015	6,551	119,352	63
Brisbane	1,150,160	1,406	820	732	183	1,795	10,153	132,319	949
Camden	1,140,320	8,323	142	12,071	—	5,490	33,953	38,657	6,156
Cook	1,065,600	3,598	355	7,508	—	2,112	8,929	13,104	4,283
Cumberland	914,800	73,538	12	34,311	—	13,294	29,710	11,265	13,728
Durham	1,354,880	7,554	193	18,437	1,273	7,014	36,977	122,588	8,085
Georgiana	1,231,360	953	1,367	2,086	101	2,928	24,517	198,325	936
Gloucester	1,375,200	2,399	687	4,061	—	1,180	21,176	3,593	2,662
Hunter	1,315,840	1,190	1,200	2,555	222	1,416	6,776	11,239	1,735
King	1,159,840	1,665	724	1,598	247	1,319	16,200	106,986	708
Macquarie	1,408,000	1,973	740	1,200	316	872	14,544	14,300	698
Murray	1,458,080	2,721	730	3,632	351	4,340	28,288	328,972	1,339
Northumberland	1,498,880	13,335	115	15,816	2,802	5,827	34,563	21,806	10,653
Phillip	1,035,520	641	1,550	722	39	1,033	6,030	89,800	163
Roxburgh	972,160	2,353	486	2,570	349	2,420	18,250	188,900	630
St. Vincent	1,704,884	2,102	852	3,689	367	2,329	20,724	62,504	3,118
Stanley	2,000,000	1,599	1,333	42	257	446	3,947	23,829	145
Wellington	1,059,840	970	1,177	693	—	681	11,548	77,693	256
Westmoreland	1,018,880	1,575	179	1,787	—	2,040	13,277	46,994	924
COMMISSIONERS' DISTS. :—									
Bligh	5,000,000	788	7,143	305	70	1,313	52,940	193,221	—
Clarence River	3,000,000	1,225	2,500	331	72	1,405	48,847	116,767	867
Darling Downs	8,000,000	658	11,666	180	45	1,200	40,600	553,000	60
Lachlan	10,000,000	2,198	5,000	2,046	209	4,386	130,594	355,600	791
Liverpool Plains	10,000,000	2,110	5,000	—	233	3,946	130,081	341,465	—
M'Leay River	2,000,000	466	5,000	440	52	884	17,128	250	706
Maneroo	2,000,000	1,916	1,052	1,969	185	5,446	106,530	353,252	603
Moreton Bay	2,000,000	268	10,000	58	14	1,127	19,412	290,962	145
Murrumbidgee	12,000,000	2,592	6,000	2,950	243	4,586	132,301	704,165	1,200
New England	5,000,000	2,231	2,500	1,400	114	3,582	79,820	822,603	1,000
Wellington	10,000,000	1,199	9,090	194	92	1,683	69,385	277,025	232
OTHER DISTRICTS :—									
Gwydir	—	—	—	—	—	2,060	118,097	109,347	50
Lower Darling	—	—	—	—	—	480	21,062	39,621	25
Wide Bay	—	—	—	—	—	51	36	20,787	—
Burnett	—	—	—	—	—	372	6,409	204,734	—
Maranoa	—	—	—	—	—	62	5,639	8,500	—
Total	96,909,364	154,515	—	133,369	9,254	97,400	1,366,164	6,530,542	65,216

Note.—Where a dash (—) is inserted, there are no returns.

By some it has been supposed that the labour market of New South Wales was overstocked, by the immigration of the last ten years; but the foregoing exposition of the state of each county indicates the reverse. According to an able and interesting report from the emigration agent for New South Wales (F. L. S. Merewether, Esq.), dated Sydney, 31st May, 1849, it appears that the total number of assisted and unassisted immigrants into the Sydney and Port Phillip districts of New South Wales, during each of the ten years between the

1st of January, 1838, and 31st of December, 1848, was only 75,252, about *one third* of the number who proceed in one year from the United Kingdom to the United States. Of the 75,252 immigrants into New South Wales during those ten years, 60,614 persons were assisted by the income derived from the sales of crown lands in the colony, to the amount of nearly one million sterling (£975,433), or at the rate of upwards of £16 per head. The details of this remarkable fact are thus given in the official returns laid before parliament 31st January, 1850:—

Year.	Assisted Immigrants.								Unassisted Immigrants.						Gross Total of Immi- grants.
	Number landed.				Total.	Cost of Conveyance.			Number Landed.						
	Sydney District.		Port Phillip District.			Passage paid out of Colonial Funds.	Gratui- ties to Various Officers.	Total.	Sydney District.		Port Phillip District.		Total.		
	Above 14.	Under 14.	Above 14.	Under 14.					Above 14.	Under 14.	Above 14.	Under 14.			
1838	3,601	2,501	—	—	6,102	£124,512	£6,756	£131,269	1,202	126	—	—	1,328	7,430	
1839	5,675	2,177	479	85	8,416	133,847	10,541	144,388	1,632	351	95	55	2,133	10,549	
1840	4,066	1,150	1,298	123	6,637	100,641	6,217	106,858	1,143	163	413	130	1,849	8,486	
1841	9,297	2,891	6,153	1,762	20,103	313,490	17,477	330,968	1,454	286	449	191	2,380	22,483	
1842	3,818	1,253	1,304	448	6,823	97,568	5,612	103,180	1,165	369	490	140	2,164	8,987	
1843	—	—	7	4	11	18	—	18	822	145	115	49	1,131	1,142	
1844	1,790	936	909	504	4,139	60,821	2,986	63,808	417	68	50	13	548	4,687	
1845	351	146	1	—	498	6,897	562	7,459	333	128	78	59	598	1,096	
1846	—	—	—	—	—	—	—	—	327	75	67	3	472	472	
1847	—	—	—	—	—	—	—	—	412	103	230	71	816	816	
1848	3,127	1,249	2,533	976	7,885	81,248	6,232	87,480	547	104	494	74	1,219	9,104	
Total .	31,725	12,303	12,684	3,902	60,614	£919,047	£56,386	£975,433	9,454	1,918	2,481	785	14,638	75,252	

Note.—It is remarkable, all circumstances considered, with how few mischances this migration across 15,000 miles of ocean has been carried on. One highly respectable shipping firm of London, Messrs. Marshall and Eddridge, have despatched to Australia in the eighteen months ending December, 1849, forty-three ships of 23,605 tons, containing 7,181 statute adults, without, I believe, a misfortune happening to any ship. The voyages have averaged 107 days to Sydney and the deaths have been only about 1½ per cent., which shows a degree of care highly commendable in the agents. According to the official returns, it appears that the number of *assisted* emigrants who embarked from the United Kingdom for New South Wales, was 7,855, and that the number landed in the colony was 7,885, the increase by births having exceeded by 30 the decrease caused by deaths. Thirty-two vessels were employed in the service, and the average contract rate paid by the government for each statute adult, was about £12 11s. The passage-money amounted altogether to £83,094, of which sum £1,846 was contributed by immigrants themselves, leaving £81,248 to be charged on the colonial immigration fund. Of the total 7,885 immigrants, 4,624 were from England, 1,483 from Scotland, and 1,778 from Ireland. The proportion of males was 3,925, and of females 3,960. The number of these who could neither read nor write was 1,811, of whom 851 were under the age of four years. With regard to the religious persuasions, the totals were—Church of England, 3,801; Church of Scotland, 1,296; Wesleyans, 750; other Protestants, 711; Roman Catholics, 1,317; and Jews, 10.

This important subject of emigration, however, must be reserved for a distinct portion of this work. I shall therefore merely observe, that the cry still, in New South Wales, is for more labour; so far from the labour market being overstocked by the introduction of 75,000 persons in ten years, the demand in the several counties and squatting districts is extraordinary. In May, 1849, on the Liverpool plains, and in New England and other districts, instant employment was given, at the following rates of wages, with provisions and lodging:—To shepherds, £15 to £28; hut-keepers, £18 to £22; farm labourers, £17 to £30; bullock drivers, £30; bricklayers, masons, car-

penters, and wheelwrights, £35 to £50; and overseers, £40 to £60 per annum; women servants, £15 to £25 a year; and these rates with wheat at 4s. to 5s. per bushel, and meat at 2d. per lb.

The colonial government has established depôts for immigrants at Paramatta, Bathurst, Goulbourn, Maitland, and Moreton Bay; to any of which places immigrants may be conveyed at the public expense immediately on their arrival. At all the depôts the immigrants are provided with food and lodging until they receive such offers of employment as may be considered fair by the officers appointed to the superintendence of the depôts. I cannot, therefore, better

494 PRODUCTS OF DIFFERENT DISTRICTS OF NEW SOUTH WALES.

conclude this description of the several localities in New South Wales, than by giving the following table, showing the principal productions of each district, and the demand for labour in them. This statement is compiled from returns furnished by the benches of magistrates in the dif-

ferent parts of the colony, for the first quarter of the year 1849; and, although somewhat voluminous, it is too important to intending emigrants, and too illustrative of the condition of the various divisions of the territory, to be omitted, or even curtailed:—

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
Sydney	—	The chief productions are vegetables and fruits.	The supply of mechanics and tradesmen is now kept up by the Colonial youths (sharp intelligent lads), who, after having completed their various periods of apprenticeship, enter the labour market, and are said to be clever and expert workmen. Farm labourers and female domestic servants are in request.
WESTERN.			
Paramatta	15	Hay, wheat, green barley, and maize, grapes, oranges, lemons, and vegetables.	There is a great demand for all sorts of country labour.
Windsor	34	Wheat, maize, potatoes, and hay.	All descriptions of country labour are in request, and a sufficient supply cannot be obtained.
Penrith	33	Wheat, barley, oats, maize, potatoes, tobacco, hay; grapes for making wine are grown to a considerable extent.	Female domestic servants and general labourers may readily obtain employment, at a fair rate of wages. Since the harvest commenced there has been a great scarcity of labour felt in this district, and farm labourers can readily obtain employment, at good wages, during the present season.
Hartley	78	Wheat, potatoes, and oats	There is no particular scarcity of labour in the district, but shepherds and farm labourers are still in demand.
Bathurst	113	Wheat and barley	There is still the same demand for servants of the following descriptions, viz.:—Shepherds, hutkeepers, farm labourers, cooks, housemaids, and general house servants. Single men and women, or married couples without children, would obtain employment readily.
Carcoar	144	Wheat, barley, oats, potatoes, hay.	Farm labourers, shepherds, hutkeepers, and domestic servants, particularly female servants, are in request. They are not to be hired at any wages.
Frederick's Valley	152	Wheat, hay, corn, and potatoes. There has been an abundant crop of wheat and hay, but the potato and the corn crops will be a failure, in consequence of the drought.	Shepherds and hutkeepers are in request.
Molong	163	Wheat, corn, hay, wool, meat, and mineral productions.	An additional supply of labourers of the following descriptions is still wanting: Shepherds, watchmen, stockmen, miners, and house servants, male and female.
Binalong	205	Wheat, oats, barley, maize, potatoes, hay.	Shepherds, watchmen for sheep, agricultural labourers, blacksmiths, and house servants are in demand.
Wellington	230	Wheat, maize, and hay	Shepherds, hutkeepers, house servants, and general farm servants are in request.
Dubbo	270	There is little or no agriculture.	The demand for labourers of the following descriptions is still urgent,—carpenters, stonemasons, stockmen, hutkeepers, shepherds, sawyers, fencers, and farm labourers.
Mudgee	150	Wheat, maize, &c.	Shepherds, hutkeepers, and house servants are in demand.
SOUTHERN.			
Liverpool	20	Wheat, hay, and maize	Female house servants are in great demand. They are not procurable in the district.
Campbelltown	33	Hay, wheat, corn, and butter	Farm and domestic servants, male and female, are in urgent demand.
Camden	39	Wheat, maize, hay, and dairy produce. The culture of the vine is also considerable, and increasing yearly. A good many horses are bred, and some sheep.	This district is amply supplied with mechanics, but there is a scarcity of the other kinds of labour. Wages are decidedly on the rise. From the abundance of fertile land, and the proximity to the Sydney market, this district affords an opening for the comfortable settlement of a dense population. During the last five years the number of inhabitants has doubled itself. There are also ample means for public worship, religious instruction, and education.
Picton	49	Wheat, maize, rye, oats, barley, hay, butter, &c.	All descriptions of country labourers are in request, chiefly general farm servants, such as ploughmen, labourers, gardeners, milkmen, mowers, and thatchers.

DEMAND FOR LABOUR IN DIFFERENT DISTRICTS.

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Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
WESTERN.			
Wollongong	64	Wheat, maize, oats, barley, potatoes, hay, and butter.	Steady, sober, and honest agricultural labourers and milkmen are much wanted in this district; also, female servants. Agricultural labour only is in request.
Berrima	81	Wheat, oats, barley, potatoes, hay, and all descriptions of English grain.	Farm labourers and domestic servants are in request.
Kiama	88	Wheat, maize, potatoes, oats, barley, butter, cheese, honey, beef, and pork.	Farm and house servants, and milkmen are in request.
Bungonia	117	Wheat, barley, maize, oats, hay, potatoes, cheese, and butter.	Labourers of the following description are in request:—Carpenters, wheelwrights, and blacksmiths; shepherds, farm labourers, and house servants, especially females.
Marulan	108	Wheat, barley, maize, oats, hay, potatoes, cheese, and butter.	Carpenters, wheelwrights, stonecutters, watchmen, and cooks, shepherds, labourers, house servants, especially females, are in request.
Goulbourn	125	Wheat, maize, barley, oats, and potatoes.	Shepherds, farm and domestic servants, both male and female, are in request.
Braidwood	164	All kinds of grain	All kinds of country labour are in request.
Shoalhaven	103	Wheat, maize, potatoes, and dairy produce.	Labourers are very scarce and wages high in consequence. Agricultural labourers and dairymen are most in request.
Broulee	209	Wheat and potatoes, principally with maize, barley, and oats.	Farm labourers and female servants of all work are in request. It is impossible to procure female servants, in particular general house servants. There are no farm labourers to be got. In harvest, or any other hurried time, the small settlers are obliged to assist each other.
Cooma	251	Wheat, barley, potatoes, and oaten hay. There is a good supply of the above this season, with the exception of the potatoes.	Good house servants and shepherds are in demand, and would readily find employment in this district. The labour in request is chiefly that required for pastoral and agricultural purposes.
Eden	258	Wool and tallow; little or no grain of any description; potatoes and hay are the only articles of farm produce raised.	Shepherds, stockmen, and hutkeepers, are in request.
Queanbeyan	182	Wheat, barley, maize, potatoes, and hay.	Domestic servants of all descriptions are much required in this district.
Yass	179	Wheat, maize, oats, barley, hay, potatoes, fruits, and vegetables	Labourers and servants of every description are in great request, and improvements are lying over for want of them.
Tumut	225	Wheat, oats, hay, maize, and potatoes.	The operations of the settlers are completely paralysed for want of labour. Children from eight years of age to sixteen are engaged at wages from £12 to £20 per annum. The labourers wanted are shepherds, hutkeepers, farm and house servants, laundresses, housemaids, and nursemaids.
Gundagai	244	Wheat, maize, potatoes, and hay.	Labour of every description is much wanted. Wages are very little, if any, lower than last quarter. The principal demand is for stockmen, shepherds, hutkeepers, watchmen, agricultural labourers, and domestics. A few mechanics would meet with constant employment.
Wagga Wagga . . .	308	Wheat, oaten hay, maize, in limited quantity; potatoes to a limited extent; wool and tallow. The soil, however, is capable of producing, in luxuriance, every description of crop by the medium of ordinary industry. Fruits of all kinds thrive well; and the vine, which has been latterly introduced, promises to rank amongst our principal products.	The employers of labour in this district are all complaining of the very high rate of wages, and improvements of every kind are neglected in consequence. Were wages low and labour abundant, the settlers here could give employment to at least 500 fresh male labourers every year. There is now a demand in the district for carpenters, smiths, wheelwrights, sawyers, brickmakers, shepherds, agricultural labourers, and domestic servants, male and female.
Albury	379	Wheat, maize, barley, oats, grass, and oaten hay, potatoes, &c.	Shepherds, watchmen, agricultural labourers, and female domestic servants are in request.
Moulamein	400	Sheep, cattle, and wool. No agricultural productions.	There is an ample field for shepherds, hutkeepers, and others who will make themselves useful about sheep-stations. The most helpless will find employment if he has only the use of his limbs and legs. The present demand is for shepherds, hutkeepers, and bush carpenters.

496 WAGES FOR LABOUR, AND DEMAND FOR IT IN N. S. WALES.

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
NORTHERN.			
Brisbane Water . . .	30	Maize, potatoes, onions ; also, oranges, grapes, and other fruit.	The demand for labour has been gradually increasing since the commencement of 1845, and many people would hire men if they could get them. The sum given to a labouring man does not, by any means, indicate the amount really paid by the employer for efficient service. There is abundant employment in the district for men who work by the job in the bush, chiefly on their own account, as sawyers and splitters, and who either sell their produce on the spot, or send it to Sydney ; consequently, some of the best workmen are at work on their own account, and most of those employed on farms are in some way inefficient, which increases their wages virtually from 10 to 20 per cent. or more, by reason of the labour performed by them being below the average quantity or quality. The want of labour and high wages still operate in limiting the cultivation of land. We think that vineyards (for which the soil is, in many places, well adapted) would be extended if labour was not so high.
Macdonald River . . .	66	Wheat, maize, barley, and potatoes.	There is a great demand for general agricultural labourers in this district.
Wollombi	93	Wheat, maize, potatoes, hay, grapes, &c.	Male and female farm and domestic servants are in great demand.
Newcastle	70	Maize, wheat, barley, oaten hay, and lucerne, potatoes, beef, pork, poultry, butter, cheese, salt, cloth, leather, fruit, and wine.	Agricultural labourers and female servants are in request.
Raymond Terrace . . .	85	Wheat, maize, barley, oats, potatoes.	Shepherds, domestic servants, male and female.
Port Stephens	91	Wheat, maize, potatoes, hay, tobacco, cheese, butter, bacon, hams, hides.	Farm labourers, bullock drivers, stockmen, wheelwrights, splitters, and fencers are in request.
Dungog	150	Wheat, maize, barley, millet, potatoes, tobacco, cheese, hay, fruit, and wine.	Agricultural labourers and house servants are in request.
Paterson	131	Wheat, maize, barley, oats, potatoes, hay, tobacco, fruits of all kinds.	A slight reduction has taken place since the arrival of immigrants, but the demand for useful labourers of the following descriptions is still urgent :— Males—labourers of all sorts, farm labourers, and shepherds. Females—house-servants of all work, cooks, and laundresses.
Maitland	110	Wheat, maize, hay, tobacco, and grapes.	Agricultural, pastoral, and domestic servants are in request.
Singleton	124	Wheat, maize, and hay . . .	Domestic servants are much wanted ; shepherds and labourers are also in request.
Muswellbrook	156	It is not, generally speaking, an agricultural district, there are several vineyards.	The difficulty in obtaining labour is very great, and the amount demanded, as wages, is ruinous to the proprietors. The immigration of the past year has not at all affected the price of labour in this district. Shepherds and farm servants are most in request.
Merton	170		
Scone	182		
Murrurundi	200	Wheat, maize, potatoes, and wool.	All kinds of country labour are in request.
Cassilis	335	Wool and hay	Shepherds and watchmen are principally in request.
Wee Waa	250	Wool and fat stock	Shepherds, hutkeepers, stockmen, and country mechanics are in request.
Tamworth	264	Wheat and maize	The demand for labour in the district is on the increase, and likely to continue so. The descriptions required are shepherds, stockmen, hutkeepers, farm labourers, and blacksmiths.
Warialda	280	Wheat and maize, but in quantities so very small as to be of no importance.	The recent immigration has not yet exercised any perceptible influence on the rate of wages in this district ; the demand for labour still exceeds the supply to such an extent, as to occasion great loss and inconvenience to employers. Shepherds, bullock-drivers, house servants, and labourers of every description are in request.
Port Macquarie	278	Wheat, hay, maize, and potatoes.	Farm labourers, shepherds, and house servants are in request. Female servants are much wanted.
M'Leay River	250	Maize, wheat, a few potatoes, and a small quantity of tobacco.	There is demand for labour in the district, to which the supply is not equal, and a number of labourers of the undermentioned descriptions would find immediate employment at remunerating rates—stockmen, farm labourers, and bullock-drivers ; and a few single females as general house servants.

Districts.	Distances from Sydney in English miles.	Principal Agricultural and other Productions of the District.	Demand for Labourers, and description of Labourers required.
NORTHERN.			
Wellingrove	330	Wheat, potatoes, and corn .	Although wages are about £3 to £4 less, it can only be effected by great risk in the increase of numbers of the flocks, occasional employment of blacks, and thus standing out against the exorbitant wages asked, waiting any opportunity to replace those who will not take any reduction. The most urgent demand is for shepherds.
Armidale	334	Wheat, barley, oats, maize, and potatoes.	Shepherds, watchmen, labourers, and mechanics are in request.
Tenterfield	334	Wheat, maize, and potatoes, for local consumption; also, wool and tallow for exportation.	Shepherds are most wanted, but farm labourers and mechanics are also in request.
Tabulam	380	Maize and potatoes	Shepherds, hutkeepers, and stockmen are in request.
Grafton	280	Wool, tallow, maize	Great scarcity of shepherds, stockmen, farm labourers, bullock-drivers, and house servants. Good house servants are not to be obtained.
Canning Downs . . .	390	Maize, potatoes, wool, tallow.	Many hundreds would find employment. Shepherds, watchmen, joiners, carpenters, smiths, agricultural labourers, and domestic servants of both sexes.
Warwick	406	Wool and tallow	Shepherds, watchmen, fencers, carpenters, blacksmiths, wheelwrights, agricultural labourers, and domestic servants, of both sexes, are in request. Many hundreds would find employment.
Drayton	409	Maize	The demand for labourers, shepherds, and domestic servants is great, and large numbers would find immediate employment.
Brisbane	450	The vegetable productions are chiefly maize, potatoes, and garden stuff, a very little oats for hay.	Stockmen and shepherds are in request.
Ipswich	470	Wool and tallow	Stockmen, shepherds, bullock-drivers, and hutkeepers are the descriptions of labourers in request.

GEOLOGY AND SOIL.—It would be unreasonable to expect connected details concerning the geological formation of a country so newly discovered, and still so imperfectly known; but the valuable labours of Count Strzelecki, Sir Thomas Mitchell, Messrs Berry, Jukes, and others, have furnished much interesting data, from which the following statements are derived:—The line of coast throughout the territory of New South Wales, presents in general an aspect of bold perpendicular cliffs of sandstone, lying in horizontal strata. These cliffs are occasionally interrupted by sandy beaches, behind which the country is low, or undulating, the high land retiring to a considerable distance. These spaces are supposed by Mr. Berry to have formed, at no very remote period, the entrances of bays and arms of the sea; indeed in many parts they are still occupied by sandy beaches, extensive salt water lagoons, being separated from the ocean only by a bank of sand, through which the impetuous waves even now occasionally force a passage; as at Reid's Mistake, at Lake Macquarie, near Newcastle, and at Lake Alexandrina, at Encounter bay. As a general remark, the country east of the Blue mountains, may be said to be of a sandstone formation, and that on the west granitic.

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Count Strzelecki, assuming it would appear, that Australia, or at least some portion of it, was elevated by volcanic power, supposes that the incandescent granitic matter was the first to appear, after the breach of the sub-marine crust; that it was on the granitic talus that quartz rock and sienite forced their way to the surface, and that upon the latter rocks serpentine, porphyry, and greenstone made their appearance. Thus about Bathurst, on the Blue mountain range, quartz rock overlaps granite, and on the Honeysuckle range, porphyry overlaps sienite; on Mount Kosciuszko (in the south-west), granite is seen forming a base 2,000 feet above the sea, upon which sienite and quartz rock attain a further elevation of 4,500 feet. There is a want of uniformity in the inclination of the uplifted stratified crust; at Mount Kosciuszko mica slate, and siliceous, and argillaceous slates, are *vertical*, and attain the height of 3,200 feet. At Mane's range, between the rivers Murray and Murrumbidgee, the upheaved strata are nearly horizontal. The stratified rocks occupy a small zone of New South Wales.

Count Strzelecki observes that New South Wales exhibits few records of irruptive igneous rocks, and preserves all its crystalline siliceous rocks, in addition to the sili-

cious sedimentary ones, which in the course of ages have accumulated upon its surface. He states that the stratified rocks from mica slate upwards, reach only to the variegated sandstone inclusively, which sandstone is incumbent on the coal deposits; and that the thickness of these stratified rocks, does not exceed 2,200 feet, of which sandstone constitutes 1,400 feet. The area of the *crystalline*, compared with that of the *sedimentary* rocks, is estimated as three to one; but in Van Diemen's Island as seven to one.

This accurate observer states that in New South Wales, the area of granite, protogene, hyalomictic, quartz rock, sienite, siliceous breccia, quartzose porphyry, siliceous slate, sandstone, and conglomerate, all containing above sixty per cent. of silica, is to the area of eurite, felspathic porphyry, greenstone, and basalt rocks, containing less than sixty per cent., as four to one; but in Van Diemen's Land, on the contrary, the area of the first division is to that of the second as one to three. Of the crystalline rocks, granite, sienite, and quartz, predominate; the greater part of the coast range of mountains, and the elevated terraces or steppes, westward of those mountains, are composed of granite, which is supposed to extend far into the interior of Australia, in masses of mammillary, tuberos, globular, or botryoidal forms. In the country to the north-east of Wellington Valley, these granitic masses present a striking resemblance to those graphically described by Baron Von Humboldt, in his account of the Altai regions. Sir Thomas Mitchell says that quartzose rock, exhibiting a tendency to break into irregular polygons, some of the faces being curved, is "most extensively distributed in the interior of New South Wales."

The sandstone strata extend from the sea coast to the river Nepean, on the west. Throughout this extent of country, the sandstone seems to spread like a level platform, and although the surface rises in hills and ridges, these seem to consist of a mass of clay, the surface of which has been worn into inequalities by the action of water. This circumstance, to some extent, accounts for the singular fact, that in New South Wales, the tops of the hills, which retain most of the original clay, are generally more fertile than the valleys, unless the latter contain alluvial deposits; and it is probably owing to a similar cause, that the valleys are cold and bleak, while the tops of the hills are warm and verdant. This clay is generally at the

surface red, and impregnated with iron; in some places, however, it is white and saponaceous, appearing under the form of pipe-clay, containing frequently calcareous stones resembling stalactites, evidently formed by aqueous deposition; at the depth of a few feet, it generally assumes the appearance of schistus, impregnated with sulphate of alumina, and sulphate of iron. In the ravines are found coal-field schistus, with vegetable impressions; and also argillaceous iron ore.

Westward, or beyond the Nepean river, the sandstone strata are forced upwards, and extend from north to south, forming the lofty ridge of the Blue mountains; towards the north these mountains are sterile and rugged; towards the south, however, the sandstone is in many places covered or displaced by whinstone, which sometimes assumes the form of common, at other times of porphyritic trap. In the latter form it is manifested through the well-watered and fertile county of Argyle.

On advancing further to the south and west, granite and limestone, both foliated and granular, are abundant, perforated in all directions with extensive subterranean caverns, exactly similar, both in character and stalactite decoration, to those found in regions of a similar formation in Europe and in America. But both are frequently met with in detached quantities in the northern and eastern parts of the colony; and a fine limestone formation occurs also to the north-westward of Sydney, at the head of William's river. In some parts of the territory (as in Argyle) the limestone passes into a beautiful close-grained marble, as white as that of Carrara; at Shoalhaven it is jet black, traversed by veins of white calcareous spar; between Wellington Valley and Boree there are innumerable varieties of finely-variegated marbles, all affording materials to numerous skilful artizans. Granular limestone is extensively developed on the Upper and Lower Hunter, between Wellington and Mount Canoblas; between Cullen-bullen and Wollerawang; on the Wollondilly, in Westmoreland, and on the Shoalhaven river. There are varieties of different minerals found in various places; Hunter's river flows for a considerable distance over rocks of jasper, beautiful agates, opal, and chalcedony; innumerable petrifications are, moreover, found on its banks.

Near the burning mountain of Wingen, amorphous specimens of cornelian, white,

pinkish, and blue, have been found; also angular fragments of ribbon and fortification agates, and balls of agate, some of them filled with crystals, varying from the size of a pea to that of a hen's egg; and others of a blueish-white and clouded colour, having spots of white dispersed throughout them. Several of the agates collected from Mount Wingen had their surfaces crested over with iron; some of those found at Mount Agate were crested with native copper, while others from the same locality presented a most beautiful auriferous appearance.

As it is desirable to throw every possible light on the geology of this interesting country, I give the following observations made by Mr. Allan Cunningham, concerning the strata seen to the north and east.

At the Wingen or burning mountain, the summit of the south-eastern side of the dividing range consists of greenstone slate, and the base of a quartzose conglomerate: the low hills, which form the eastern side of Liverpool plains, consist of a similar conglomerate: while the hills to the north of the plains are composed of a very finely-grained granite. Between the latitudes of 31° and 30° , the country gradually ascends from the level of the Liverpool plains, or 840 feet, to nearly 2,000 feet above the level of the sea, and presents a broken irregular surface, often traversed by low ridges of clay slate. To the north of 30° lat. the base of the ridges by which Stoddart's valley is bounded, consists of serpentine, their flanks and summit of hornstone, and the hills at the head of the valley, of clay slate. In the bed of Peel's river, which crosses the northern extremity of the valley, a thin horizontal bed of calcareous sandstone was noticed, between strata of indurated clay or shale. The country for fifty miles to the north of Peel's river exhibits a moderately undulating surface, covered in some parts with fragments of cellular trap; and the hills which bound the route on the westward, as far as the parallel of $29^{\circ} 10'$, consist of a reddish coarse-grained sandstone, in nearly horizontal strata. Beyond this point, towards the north-east, and a little to the north of 29° S. lat., the banks of Mogo creek were found to be composed of a coarse friable sandstone. Pursuing the same direction, the country for forty miles presented a rugged surface, and the prevailing rocks were sandstone and clay slate; but occasionally, the tops of the hills formed low terraces, composed of a quartzose conglomerate. In the bed of a creek in

$28^{\circ} 26'$ S. lat., and in the meridian of Paramatta (151° E. long.), a hard slaty rock was noticed; and the country beyond it was found to be composed, where it could be examined in the dry water-courses, of flinty slate. In $28^{\circ} 13'$ S. lat., a fertile district commences, extending for eighteen miles, or to the foot of the dividing range, in the parallel of 28° . At the base of these mountains, were procured specimens of basalt containing olivine: at the height of 1,877 feet above the level of the sea, the rock consisted of amygdaloid; and the extreme summit, 4,100 feet above Moreton bay, of a brick-red cellular trap, the cells having an elongated form and parallel position.

In 29° S. lat., a deep gorge is composed of clayslate, and traversed by a rapid stream, in the bed of which were noticed large boulders of the grey granite. During the next forty miles, the only rocks noticed were reddish granite, and fragments of basalt. In $29^{\circ} 26'$ S. lat., large masses of a fine quartzose conglomerate occurred, and they were afterwards found to be very generally scattered over the adjacent country. The boundary hills of Wilmot Valley are stated to be a fine-grained gray granite; and those which form the head of it, in $30^{\circ} 11'$ S. lat., of brownish porphyry, containing grains of quartz.

The geology of the country farther north, is equally striking. The western shores of Moreton bay, from the entrance of Pumicestone river, to Red Cliff point, are faced by a reef of considerable breadth, which at low water, is stated by Mr. Cunningham to exhibit a ledge of chalcedony. Pumice-stone has been found on different parts of the east coast of Australia.

In tracing the Brisbane river, which falls into Moreton bay, the first rock observed was talc slate or chlorite; and opposite the settlement, sixteen miles from the mouth of the river, is a quarry of pinkish claystone porphyry, used for building. In the ravines further up serpentine occurs, traversed by veins of asbestos and magnetic iron. Sixty miles from Moreton bay, ledges of hornstone crop out in the banks; and in the same part of the river, a considerable seam of coal appears in its channel. A portion of the stem of a fossil plant, presenting "concentric fibrous bands, and a longitudinal foliated structure at right angles to the bands," was found in the vicinity of the seam of coal. At "the Limestone station," on Bremer River, which falls into the Bris-

bane, were procured a series of specimens, which consisted of yellowish hornstone; indurated white marl, resembling some of the harder varieties of chalk, and containing immense masses of black flint; blueish-grey chalcedony passing into chert; and a gritty yellowish limestone. A bed of coal has likewise been noticed in the Bremer, and traced from it to the Brisbane. To the south of the limestone station is a remarkable hill, consisting of trap, called Mount Forbes; and fifty miles to the south of the penal settlement on the Brisbane, is the Birman range, from which were obtained specimens of compact quartz rock; and from Mount Lindsay, likewise south of the Brisbane, specimens of granite.

The strata in the cliffs, containing the Newcastle coal basin, are stated to be,—coal (the lowest of the deposit), three feet; greenish sandstone, fifty; coal, three; greenish sandstone with blue veins, twenty-five; coal, five; clay rock (greyish), and shale (blueish), with various impressions, forty-three; coal, five; cherts, gritstones, with angular fragments of flint intermixed with thin veins of coal, fourteen; coal three; conglomerate (the uppermost of the deposit), twenty-three; total 204 feet.

The osseous breccia found in the caves at Wellington Valley, have been adverted to in the general view of Australia, at pages 398–9. Their structure appears to indicate that New South Wales has passed through periods of terrestrial revolution precisely similar to those experienced in other parts of the world. The bones found in the caves attest the former existence of animals of whom we have no other record, and also of several similar in species to those now known, but of gigantic size. Immense beds of sea-shells are found at various elevations above the sea; in some places on the tops of hills, in others imbedded in sandstone. Close to the banks of Hunter's river, layers of shells have been found of unexplored depth, and have long been used by the inhabitants in the manufacture of lime. Some of the valleys, such as Dart Brook and Lake George, possess imperfectly fossilised fragments of trees. Elevated beaches in horizontal beds and at various heights are disposed at wide intervals along the coast. At Lake King (Gipp's Land) they are seventy feet above the sea, composed of an indurated reddish clay and calcareous paste, containing *ostrea* and *anomia*, and different from the existing species, which latter are found on

the elevated beaches between Cape Liptrass and Portland bay. Basalt and its varieties occur at Port Stephens, the Upper and Lower Hunter, and other places. The conclusions at which count Strzelecki arrived, after a series of examinations of the coast line of mountains in Eastern Australia, are—that the chain was upheaved during four distinct epochs, to a height varying from 1,000 to 6,500 feet above the sea level; that the upheaving force, arising from volcanic action, was exerted with different degrees of intensity, as shown by the varying heights of the peaks, but that it was uniform in direction, ranging from north-east to south-west; that the lithological character of this chain, and of the spurs which belong to it, is chiefly due to the presence of crystalline rocks, and that the irruption of granite, sienite, hyalomictite, and protogene, took place at the beginning of the first epoch; that of quartz and porphyries during the two first epochs; and that of basalt and its varieties during the last two; the irruption of greenstone continuing during the whole four. From this lithological character, and from the geological phenomena found grouped along its course, this mountain range may be considered as the Australian eastern axis of perturbation.

The *Crystalline* and *Unstratified Rocks*, mentioned by Strzelecki, as belonging to the first epoch, are granite proper, porphyritic granite, glandular granite, protogene, sienite, hyalomictite, quartz rock, serpentine, and eurite; the *stratified* or *sedimentary* rocks, are mica slate or schist, silicious slate and argillite. The descriptions by which these several rocks may be known, are stated by the distinguished geologist to whom I am so largely indebted in this section.

Granite Proper.—Composed of equal proportions of quartz, felspar, and mica; structure granular, dissemination of ingredients regular, colour reddish-grey. *Glandular granite*, oval-shaped masses of granular mica, tabular quartz, and tabular felspar, irregularly interspersed through a quartzose paste. *Porphyritic granite*, quartz, and mica, with large oblong and irregular crystals of felspar, confusedly imbedded in the masses. *Protopogene*, a confused crystallization of talc, felspar, and quartz, marked by an unequal distribution of ingredients, and by the entire exclusion of mica. Colour greenish-white, sometimes inclining to red. *Hyalomictite*, a homogeneous, milky, or smoky-looking quartz rock, with an admixture of white

mica, to the entire exclusion of felspar. *Sienite*, a granular and massy structure, invariably composed of a vitreous and translucent quartz, and of hornblende, which is prismatic and of a dark blue green; at times intersected by veins of sulphuret of iron, by which the already beautiful appearance of the rock becomes yet more resplendent; the presence of sienite always indicates the proximity of granite. *Quartz*, in New South Wales, of a whitish or somewhat milky colour, sometimes found translucent and perfectly homogeneous. *Eurite*, composed entirely of felspar, laminated or grained; colour, a pale yellowish-red, inferior in hardness to quartz, adheres to the tongue, and exhales an argillaceous odour. *Serpentine*, colour sometimes emerald, sometimes leek-green, but never uniform throughout; externally it often shines with a resinous lustre, at the edges it is translucent; solid, semi-hard and brittle, fracture earthy, uneven, sometimes laminated, fragments irregular and splintery, feels unctuous; it is traversed by short, curved, and narrow veins of a white silky amianthus, the fibres of which are perpendicular to the direction of the vein.

Mica, or Slate Schist.—According to the varying proportions and the difference of colour of quartz and mica, which, combined, form mica slate, the shades are green, white, red, blue, brown, and yellow; structure laminated. *Siliceous slate*, usually grey, sometimes white, reddish, or yellowish, traversed by numerous veins of quartz, looks greasy, and is tough. *Argillite*, a greyish-black, with a bright silky lustre; substance opaque, with a smooth surface, structure foliated; adheres to the tongue, and yields a strong argillaceous odour: fragments tabular, thin, shining, and friable.

Mount P. P. King, whose summit is 2,646 feet above the sea (see page 393), is described by Mitchell as having at its base, and on its sides, in large masses, the very compact felspathic rock which characterises the valley of the Darling. This, he adds, has been considered a very fine-grained sandstone; but it is evidently an altered rock. Here, in contact with trap, it possessed the same tendency to break into irregular polygons, some of the faces of which were curved; one mass having been so tossed up, that its lower side lay uppermost, inclined at an angle of about 60°. That this is a hypogene rock, sometimes in contact with granite as well as with trap, is evident at Oxley's

Table Land, and other places. (*Tropical Australia*.)

In New South Wales, as in other countries, the rock which forms the basis of the soil may be known from the trees or herbage growing thereon. Thus a dwarfish eucalypti, with glaucous-looking leaves, growing mostly in scrub, indicates a sandstone formation, while open grassy park-like tracts thinly interspersed with lofty eucalypti, characterise the secondary ranges of granite and porphyry. The limestone formation has on its superincumbent soil trees of lofty growth and large size. These marked features will account for the idea expressed by Captain Sturt, that the Australian trees seemed gregarious. In general the covering of sandstone is the common Australian clay, but over whinstone it is invariably a light black mould.

Of the productiveness of the Australian soils, there cannot be a doubt. Many farms have been annually cropped for twenty years without manuring; the eucalypti trees by shedding their bark, annually furnish an ample supply of alkalies to the soil, which has a degree of softness, coherence, and porosity, common to all virgin soils; a low specific gravity, and a proportion of organic to inorganic matter, amounting to a third, and in some instances to a half of the whole quantity. The numerous places where carbonic acid gas escapes through the fissures of the earth in New South Wales, cause many of the rivers, particularly near their source, to be impregnated with this acid, and they are also charged with mineral salts. In frequent instances the waters of the colony pass through calcareous rocks, and carry with them dissolved lime, they are therefore very valuable for irrigation, which may be most extensively and usefully practised in Australia. Any one who has visited Malta, and seen the rich crops produced on an apparent barren sandstone formation, by irrigation, will recognise the great benefit which New South Wales would derive from pursuing the same course.

Mr. J. Pattison, a resident of twelve years' experience in New South Wales, and the author of a recent brochure on its resources and capabilities, says the country is capable of sustaining many millions of people by its agricultural products; for "there is abundance of land of the richest description." Speaking of the qualities of the soil, he says:—"The produce, under a good sys-

tem of husbandry, is enormous, and would stagger the credibility of those who have not been eye-witnesses. The late Dr. Wilson, R.N., obtained, at his estate in the county of Murray, *eighty-five bushels of wheat per acre*; and at Narren Gallen, near Yass, on the estate of Cavan, I have seen 700 bushels reaped from a field of fourteen acres, or equal to *fifty bushels per acre*.*

Count Strzelecki, after a minute and careful analysis of the soils of New South Wales and Van Diemen's Land, extending over forty soils in quality, furnishes the following as the *mean* of his investigations:—

Quality of Soils	Highest productive power.	Lowest productive power.
PHYSICAL CHARACTER:—		
Absorption of solar rays . . .	+ 13.4	+ 14.21
Emission of heat . . .	— 2.5	— 6.1
Capacity for moisture . . .	+ 8.0	+ 3.6
Specific gravity . . .	1.8	2.04
CHEMICAL CHARACTER:—		
Soluble portions of 100 parts	30.23	8.53
Proximate constituents in 100 parts:		
Vegetable and animal matter	14.70	5.50
Water . . .	7.88	3.71
Silica . . .	54.32	69.99
Alumina . . .	9.82	10.02
Peroxide of iron . . .	3.18	4.48
Carbonate of lime . . .	4.74	4.12
Sulphate of lime . . .	2.33	0.08
Potash and soda . . .	0.74	0.56
Chlorides . . .	traces of	traces of
Magnesia . . .	0.82	0.87
Metallic sulphurets and oxides	0.63	—
Loss . . .	0.84	0.67

The inferences which the analyser draws from these facts are—

1. That both the fertile and the sterile soils absorb on an average nearly the same amount of solar heat; but the fertile soil emits, through terrestrial radiation, an amount of heat two-thirds less than that yielded by the sterile soil.

2. The fertile soil absorbs more than double the quantity of moisture absorbed by the sterile soil.

3. The solubility of both soils in hydrochloric acid is not equal; the fertile soil in 100 parts containing 30 parts of soluble, the sterile soil but eight.

4. The fertile soil possesses nearly three times as much of vegetable and animal matter as the sterile soil.

5. The mineral constituents of each kind

* *New South Wales; its past, present, and future Condition; with Notes upon its Resources and Capabilities.* London, published by Johnson and Hunter, 1849—p. 90.

of soil considered apart from the vegetable matter, the hygrometric water, and the loss in the analysis, and expressed in their atomic weight, are in the—

High productive Soils.

Mineral Constituents.	Parts.	Atomic weight.	Proportion in Nos.
Silica . . .	70.93 =	0.122	30
Alumina . . .	12.84 =	0.020	5
Peroxide of iron . . .	4.15 =	0.004	1
Carbonate of lime . . .	6.25 =	0.020	5
Sulphate of lime . . .	3.04 =	0.007	1
Potash and Soda . . .	0.95	—	—
Magnesia . . .	1.00	—	—
Metallic oxides . . .	0.87	—	—

Low productive Soils.

Mineral Constituents.	Parts.	Atomic weight.	Proportion in Nos.
Silica . . .	77.70 =	0.132	26
Alumina . . .	11.11 =	0.017	3
Peroxide of iron . . .	4.94 =	0.005	1
Carbonate of lime . . .	4.57 =	0.014	2
Sulphate of lime . . .	0.08	—	—
Potash and soda . . .	0.56	—	—
Magnesia . . .	0.87	—	—
Metallic oxides . . .	—	—	—

Thus it will be perceived that the fertile soils differ from the sterile, not only in the number of constituents, but in the proportion in which they are found to be combined. The productive quality of soils is influenced by the amount of absorption and emission of solar heat; when the proportion of absorption to emission is 5.76 : 1, it is highly favourable to agriculture; whenever it is 2.35 : 1, it is highly injurious. The extent of capacity of absorbing moisture is of course an important element in the successful prosecution of husbandry. The more or less soluble constituents determines the productive power of soils; as respects Australia, those that have thirty per cent. of soluble matter are best adapted for the former; those which have only eight are the least. The amount of vegetable matter in a soil appears to regulate the proportionate power of absorbing and of emitting heat, and of absorbing and of retaining atmospheric moisture. The importance of manuring, or, in other words, of feeding soils with the vegetable and other ingredients necessary for the food of plants, is therefore obvious; and some Australian cultivators now find their lands, after twenty years' successive cropping, without food or rest, reduced to the exhausted condition of an overworked animal, deprived of its sustenance and sleep.

The average production of wheat in Australia, on good soils, is from twenty to thirty bushels per acre, weighing from sixty to sixty-five pounds the bushel; in some districts forty and even fifty bushels have been obtained from an acre of land. Maize yields forty to seventy bushels nett, according to the quality of the soil, and the carefulness of the culture. The potato gives two crops in the year, and green peas are gathered in winter as well as in summer.

MINERALOGY.—New South Wales abounds with mineralogical treasures; gold, copper, and steel have been found, but the most useful discovery yet made is coal, which exists in several districts, but especially in the country south of Hunter's river, which is an extensive coal-field, and where, as previously stated, the sea cliffs present a most interesting section of this stratum. The seams of coal are distinctly visible on the abrupt face of the cliffs, forming the south headland of the harbour of Newcastle, and may be traced for nine miles, when they abruptly terminate, suddenly bending downwards, and sinking below the level of the sea. From this place a long sandy beach and low land extend to the entrance of Lake Macquarie (Reid's Mistake), the south head of which rises into high cliffs, in which the coal strata again present themselves. Between the coal beds are strata of sandstone, and beds of clay slate, with vegetable impressions—sometimes, but more rarely, indurated claystone. Embedded in these strata, there is abundance of argillaceous iron ore; this is occasionally cellular and in layers, but for the most part it appears in the form of petrifications of trees and branches, irregularly dispersed. The coal is decidedly of vegetable origin, the fibre of the wood being often quite distinct, while the vegetable impressions in the clay slate, under and over the coal, are singularly beautiful; some of these subterranean plants appear to have been in full flower, so that a skilful botanist might ascertain even their species; and Mr. Berry thought he could distinctly ascertain the leaf of the *lamia spiralis*.

About three miles along the south coast of Newcastle, in an upright position at high-water mark, under the cliff and beneath a bed of coal, there was recently found the butt of a petrified tree, which, on being broken, presented a deep black appearance, as if passing into jet; and on the top of the cliff at Newcastle, embedded at about a foot

beneath the surface, lying in a horizontal position, and nearly at right angles to the strata of the cliff, the trunk of another tree was found, finely grained, both specimens being traversed by thin veins of chalcedony. In the alternating strata of the coal, which runs generally in three parallel horizontal beds, are found nodules of clay, ironstone, and trunks and stems of arundinaceous plants in ironstone; in one place a narrow bed of ironstone, bearing impressions of leaves, is remarkable; while thin laminæ of the same mineral, the surface of which is traversed by square and variously shaped sections of the same, are seen on several parts of the shore, both in the face of the cliff parallel with the beds of coal, and extending into the sea, forming the strand at low water. Nor are these indications confined to the district of the sea-shore at Newcastle; thin beds of coal and iron may be seen along the banks of the Paramatta river, and in other places. Coal abounds in the vicinity of the burning Mount Wingen, and near the Kingdon chain of ponds, also at Moreton Bay.

The Newcastle (New South Wales) coal, analysed by count Strzelecki, gave—(one description)—charcoal, 62.8; bitumen, 25.2; earthy matter, 25.2. One pound of coal yielded one foot 1.806 cubic inches of illuminating unpurified gas. The gaseous mixture contained in 100 volumes, was—sulphuretted hydrogen, 10; carbonic acid, 10; olefiant gas, 17; carburetted hydrogen, 11; other inflammable gas, 52. Every 100 parts in weight, yielded—coke, 71.2; coal tar and ammoniacal liquor, 15.6; ultimate elements, deducting the earthy matter, carbon, 70.5; hydrogen, 20.4; nitrogen, 9.1. This coal burns easily, with a reddish flame, swells and agglutinates. It is of a black colour, even fracture, foliated structure, soft, and brittle; specific gravity, 1.31. The quality of this coal is about equal to the English Newcastle coal, it is now being extensively raised by the Australian Agricultural Company, who have a lease of the mines. A seam has been recently found ten feet thick; and there are, probably, other large outcrops of coal in the adjacent districts.

Copper ore of very rich quality, is found in great abundance; in the districts of Wellington the beds of ore are supposed to extend for miles in every direction, and according to the *Hawkesbury Courier*, "a high hill in the neighbourhood presents indications of being a solid mass of metal." The

Molong Mining Company are raising large quantities of ore for shipment to England; there is a rich vein of copper near Bathurst.

Iron abounds in various parts of the colony, and most of the smaller streams are impregnated with iron. A few miles north by west of Mount Wingen, are stumps of trees standing upright in the ground, apparently petrified, and strongly impregnated with iron.

It has been before stated, that in the neighbourhood of Camden, a mine has been opened where *steel*, according to Mr. Pattison, "is dug from the earth with little boring and of endless extent." He adds, that he saw a very handsome knife, made from the metal which had been worked without any overground preparation, by a Sydney cutler, as a present for the governor, Sir Charles Fitzroy; the handle being of native tortoiseshell, with a plate of native gold.

Gold, most probably, exists in large quantities. Sir Thomas Mitchell, during his recent visit to England, showed me beautiful specimens of gold embedded in white quartz, and stated that it was also obtainable in grains or pieces of considerable extent. He discovered the gold region while exploring the interior, and observed, that he was unwilling to notify the region, lest the colonists should leave their flocks and herds to go in search of gold. Many years since, that distinguished geologist, Sir Roderick Murchison predicted that gold would be extensively found in Australia, by reason of its geological formation, and the latitudinal direction of its mountain range; for it is a singular fact, that the gold districts yet discovered are in mountains, with a latitudinal rather than a meridional direction; to which it may be added, that the perturbing subterranean forces of the earth, as manifested in the Rocky mountains, the Andes, the Himalaya, or from Kamtskatka to Borneo, have a general axis from north to south.

CLIMATE.—The seasons of New South Wales are the opposite of those of England, January being the middle of summer, and July of winter. The summer extends from the first of November to the first of March; the spring and autumn are brief, but well defined; the winter of a bracing coolness, with occasional frosts at Sydney, and snow in the interior. The spring months are September, October, and November; the summer, December, January, and February; autumn, March, April, and May; winter, June, July, and August. March, April, and

August are generally considered the rainy months. The average temperature of spring is $65^{\circ}5'$, of summer 72° , of autumn 66° , and of winter 55° . The barometrical pressure is about 29.94319 inches, and the average of the thermometer 64° Fahr. In Sydney, the thermometer is rarely below 40° ; in Paramatta, it is frequently down to 27° in winter; and in my garden at Paramatta I have on a winter morning eaten frozen milk beneath an orange tree, from which I gathered the ripe and ripening fruit. Indeed, there is every variety of climate; by proceeding to the Blue mountains a cold winter may be enjoyed, or at Moreton Bay a warm one. Of course, as the land rises above the level of the ocean, a difference of temperature is felt; the winter at Bathurst, where the luxury of snow is in its season enjoyed, being much colder than on the sea shore. Of the peculiarly salubrious climate of Australia I can gratefully bear record, having proceeded to Van Diemen's Island and New South Wales, from the east coast of Africa, while suffering from a severe fever, acquired while exploring the rivers and country adjacent to Mozambique; and in a few months the fever and its distressing consequences entirely disappeared. The air is remarkably elastic; old persons arriving in the Australian colonies from Europe, find much of the hilarity of youth restored to them. Not more than five or six sick persons will be found in a community of twelve or fifteen hundred; at some of the military stations seven years have elapsed without the loss of a man; several colonists are stated to be upwards of 100 years of age; I saw one woman who was said to be 125 years of age; and the singularly horny texture of her skin seemed to confirm the almost incredible statement, yet she went about her daily work at a road-side inn. In New South Wales, during summer, I frequently slept in the open air, without the slightest injurious consequences; and during the expeditions of Mitchell, Sturt, Leichardt, Eyre, and other explorers, they lived for months without any other canopy than the clear blue Australian sky; and notwithstanding scanty and innutritious or saline food, they enjoyed wonderfully good health, such as they could not probably have maintained under similar circumstances in any part of the world. It is said to be owing to the fineness of the climate that dogs do not go mad in Australia, that horses are seldom or never known to kick, that herds of wild cattle have a degree of

tameness unknown on the Pampas of South America, and that the descendants of Europeans are remarkable for an equanimity of temper, which is probably partly attributable to the salubrity of the climate.

The following table exhibits the range of the barometer and thermometer for each month in the year, the state of the hygrometer, and the prevailing winds, and weather at Sydney:—

Months.	Barometer, 62 feet above the sea.		Hygrometer.		Radiator.		Thermometer.			Winds.	Weather.				
	Maximum.	Minimum.	Max.	Min.	Max	Min	Max.	Med.	Min.		Days Fine.	Days Rain.	Stormy.	Cloudy.	Stormy and Cloudy.
Jan. .	30.300	29.430	68	9	101	63	91	75½	60	S.S.E.	15	4	12	—	—
Feb. .	30.300	29.680	75	35	94	48	90	74	58	E.S.E.	20	4	5	—	—
March	30.490	29.580	74	10	83	42	83	71½	60	E.	19	10	2	—	—
April.	30.458	27.772	78	40	87	53	83	70	57	W.	21	6	—	3	—
May .	30.442	29.602	79	26	66	35	73	61½	50	W.	23	3	—	5	—
June .	30.350	29.290	78	25	67	32	62	52	42	S.W.	20	1	—	9	—
July .	30.315	29.840	76	27	59	26	60	54	48	S.W.	17	8	5	—	1
Aug. .	30.248	29.488	78	29	67	31	66	55	44	S.W.	14	9	7	—	1
Sept. .	30.380	29.520	79	18	83	34	67	49½	42	N.E.	20	—	8	—	2
Oct. .	30.200	29.300	80	20	86	42	82	69½	57	N.E.	21	3	5	—	2
Nov. .	30.220	29.860	76	10	84	51	91	74	57	E.&W.	31	—	—	—	—
Dec. .	30.110	29.530	72	30	96	59	87	75	63	N.E.	20	—	10	—	1
Year .	30.490	29.290	80	9	101	26	91	—	28	—	241	48	54	17	7

According to a meteorological register kept for five years, at the south head of Port Jackson, a naked sandstone cliff, exposed to high calorific effects from solar radiation, the *extreme* range of the barometer was 1.140 inch, and its *mean* range 1.0594 inch, or, in round numbers, about one inch to one-sixteenth. The same general law which influences the barometer in Europe, operates in Australia; the mercury rises with the polar and falls with the equatorial wind; *i.e.*, in Europe a northerly wind would cause an elevation of the barometer; in Australia a southerly wind produces the same effect, in both hemispheres an equatorial wind would cause a fall.

The annual *mean* of the external shade of the barometer at the same place, was—

	1840.	1841.	1842.	1843.	1844.
For the year.	63.186	64.656	62.72	62.73	61.49
April . . .	67.23	67.66	61.46	63.62	60.31
October . .	68.16	62.76	63.47	61.07	61.12
Summer . .	—	—	68.390	67.987	66.731
Winter . .	—	—	57.055	57.473	56.245
Difference.	—	—	11.335	10.514	10.486

Note.—April corresponds to mid-autumn in England, October to mid-spring.

Annual Mean Temperature at Port Jackson.

Years.	Summer.	Winter.	Difference.
1842	68.390	57.055	11.355
1843	67.987	57.473	10.514
1844	66.731	56.245	10.486

Sydney (Port Jackson) may be compared with a port to the northward and another to the southward, thus—

Thermometrical Range.	Port Macquarie, Lat. 31° 25'.	Port Jackson, Lat. 33° 51'.	Port Phillip, Lat. 38° 18'.
Summer:—			
Maximum . .	88.3	81.9	90.6
Minimum . .	61.8	59.0	48.8
Fluctuation . .	26.5	29.9	41.8
Mean	75.0	73.9	69.4
Winter:—			
Maximum . .	75.3	73.3	69.8
Minimum . .	46.8	45.3	36.9
Fluctuation . .	28.5	28.0	32.9
Mean	61.0	59.3	53.3
Annual Mean . .	68.0	66.6	61.3
Annual Fluctuation	27.5	28.2	37.3
Warmest Month .	Nov.	Nov.	Nov.
Coldest Month . .	August	July	July

The registers from which the above are taken were kept for the three years ending with 1842. It will be observed that the highest annual fluctuation of the three stations is at Port Phillip, viz., 37.3; but at Quebec it is, 59; at St. Petersburg, 57; at New York, 55; Buda, 44; at Warsaw, 43.2; at Philadelphia, 43.3; at Vienna, 43; Copenhagen and Zurich, 38.9; Milan, 38.4.

In the southern hemisphere snow is perpetual at 6,000 feet above the sea, in Europe at 10,000 feet. This may be partly attributed to the great extent of ocean in the south, and the absence of any intervening

land between the south pole and Australia, whereby there is at least a difference of five degrees of latitude in regard to temperature. Considerable allowance must also be made for the direction, intensity, and thermometrical condition of different currents of air. Thus, in ascending Mount Kosciuszko, in the Australian Alps, Count Strzelecki found the stratum of air at 3,000 feet much colder than that at the elevation of 6,500 feet. So also at Mount Roa (Sandwich Islands) three different currents were noted; one at Byron's bay, light from the S.E., temperature 86° ; one at an elevation of 4,000 feet, strong from the westward, temperature 55° ; and one at 6,000 feet, brisk N.W., temperature 67° . A hail storm on Ben Lomond in Van Diemen's Land was observed to originate in a stratum of air far below the point of congelation, and moving between an elevation of 800 and 5,000 feet, *i.e.*, between Ben Lomond, in a temperature of 56° , and the Vale of Avoca, 4,200 feet lower down in 80° . This storm was succeeded by a polar wind. At the Cordilleras in Chili snow has been found melting at 15,000 feet elevation, while it was unaltered at 10,000 feet. So also rain sometimes falls in Australia when the temperature near the earth is below the freezing point. My own theory of these phenomena is that heat is produced by the electricity emanating from the sun, and the magnetism contained in the earth being brought into contact; the sun itself being not a body of fire, but an evolver of the electric fluid, which on being poured *perpendicularly* on the earth, elicits terrestrial magnetism, and heat is the product. Hence, at a certain distance from the earth, even within the torrid zone, there is no caloric, but a region of perpetual snow, as intensely cold as at the arctic circle, where also the rays of the sun fall only obliquely, and not *direct*.

It is probably this constant evolvment of heat from the surface of the earth, which causes the unceasing oscillations of the atmospheric currents, not only affected by the increasing or decreasing declination of the sun, but also by a different cause, *i.e.*, an upper current of cold air, descending to one of warmer temperature nearer to the earth, it displaces, and is in its turn displaced when the oxygenized or electric matter with which it was charged has been expended in the support of animal and vegetable life.

Rain.—The quantity which falls in Australia is considerable; the following shows

the total quantities registered as fallen, with the respective number of days, at South Head, Port Jackson, 240 feet above the mean tide level:—

Year.	Number of Inches.	Number of Days.
1840 (9 months) .	49.65	108
1841	76.31	142
1842	48.32	137
1843	62.78	168
1844	70.67	157
Total . . .	307.73	712

out of, and comprehending a period of four years and nine months = 1,736 days.

Two extraordinary falls of rain have occurred during this period, *viz.*, one of 20.12 inches, on 29th April, 1841, during heavy squalls from E.N.E.—E.S.E.; the other, 20.41 inches, on 15th October, 1844, wind between S.E. and S.W.

Strzelecki gives the annexed return for New South Wales and Van Diemen's Island, which includes 8,730 days of observation, brought to the term of averages for every season at each station:—

Station.	Summer.	Winter	Annual Quantity.	Average number of inches.
New South Wales:				
Port Macquarie .	37.58	25.10	62.68	} 48.60
Port Jackson . .	24.42	28.00	52.42	
Port Phillip . .	13.25	17.47	30.72	
Van Diemen's Island:				
Woolnorth . .	19.68	29.07	43.75	} 41.28
Circular Head .	11.31	24.11	35.42	
Port Arthur . .	16.94	17.75	44.69	

Rain sometimes pours down in continuous torrents in Australia; one fall, during twenty-four hours, at Port Jackson, amounted to twenty-five inches. Mitchell, Sturt, and other explorers found marks of extraordinary floods in the Nammoy and other rivers; ten to fifteen feet above the ordinary level of a river is not an unusual height during a season of rain. The above record of rain annually falling, will dissipate a prevailing idea that but little moisture exists in Australia; the average annual fall in London, is 22.19 inches, in New South Wales, 48 inches; in Van Diemen's Island, 41 inches per annum.

It must, however, be admitted, that with a comparatively high temperature and thirsty soil, Australia requires a far larger amount of moisture than England, and that the effect is more beneficial with a smaller quantity, in the

latter-named country, than that derived from a larger quantity in the former region. At Port Macquarie, where the heat of summer is intense, more rain falls during that season (thirty-seven inches), than in the whole year at Port Phillip (thirty inches), where the climate is less torrid, and the land less exposed to the parching effects of the hot winds. It may be, also, that there is a greater amount of absorption of solar rays, and radiation, or emission of heat, in New South Wales—in some parts of Australia—than in others; for it is stated by Strzelecki, that on some soils all the early crops are invariably injured by the frost, while on other soils such injury never takes place.

The prevailing directions of the winds at Sydney are thus indicated:—

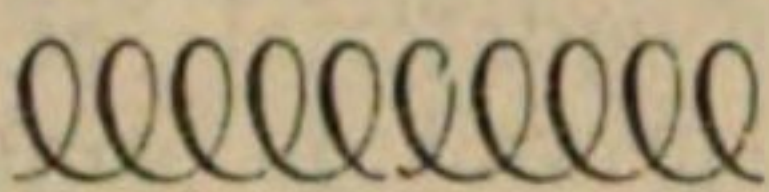
Wind's Direction.	Morning.	Noon.	Evening.
North	4	7	23
North-north-east . . .	—	11	11
North-east	12	129	109
East-north-east . . .	—	11	5
East	4	3	8
East-south-east . . .	1	2	5
South-east	9	45	70
South-south-east . . .	8	27	13
South by East	1	5	4
South	29	31	15
South by West	3	2	4
South-south-west . . .	8	11	8
South-west	109	35	45
West-south-west . . .	42	5	3
West by South	4	2	1
West	118	10	8
West by North	2	—	—
West-north-west . . .	6	2	3
North-west	4	16	19
North-north-west . . .	1	8	5
North by West	—	—	2

During the summer months a regular sea breeze sets in daily, and refreshes the inhabitants along the coast. The direction, humidity, and siccidity of the winds in Australia, are, doubtless, influenced by the general laws which govern the atmospheric circulation; but these laws are modified by various local circumstances, such as the extent and form of the island-continent, and the vastness of the surrounding ocean. Winds from the northerly and southerly quarters are the most numerous; in winter, on an average of 100 winds, 60 proceed from the southerly quarter, making the proportion of the polar to the equatorial, as 3 : 1; in summer, of 100 winds, 42 are from the northerly quarter—polar to equatorial, 1 : 2. These proportions vary at Port Phillip and other stations owing, probably, to the posi-

tion and configuration of the land. At Port Jackson the winter is marked by the prevalence of polar winds, and the summer by that of equatorial; at Port Phillip, the equatorial prevail in winter, and the polar in summer; and in Van Diemen's Island the equatorial winds prevail during both summer and winter.

The *hot winds* of Australia have engaged the attention of geologists, as well as of meteorologists; they are supposed to originate in the central deserts. The intense heat of these winds raises the thermometer, in the shade, to 117°, or even 120°, Fahr.; the grass becomes dry, like hay; the fig is destroyed; the red and blue grape lose their colour and watery elements; green leaves lose their colour, turn yellow, and wither; and the promising harvest of the agriculturalist is frequently ruined. Westward of the Blue mountain range, the temperature of a summer day is increased by this wind 40°; on the eastward of the range, from 25° to 30°. The effects of this wind on the animal frame, are stated, on the authority of captain Sturt. I have, however, myself, ridden for the greater part of the day, in New South Wales, during the prevalence of these siroccos, and felt less fatigue than from a slight exertion during the rainy season in Bengal. In the latter instance, the atmosphere was saturated with moisture; in the former, the air was totally deprived of all humidity. Count Strzelecki experienced the hot wind with great violence sixty miles at sea, in the parallel of Sydney, and found the sails of the ship covered with an impalpable sand, containing one-fourth of aluminous and three-fourths of silicious and metallic matter; he also experienced it at the top of Ben Lomond, at an elevation of 5,000 feet, but did not feel it at 3,000 feet lower, to the windward. It does not appear that this current of heated air is confined to any particular altitude, but rushes from a lower to a higher stratum of air, according to circumstances. Not unfrequently, during the prevalence of this wind, the high clouds, cirrus, and strata, at once disappear, while the lower remain unchanged; I noticed, also, that at night the air was filled with what is termed "sheet lightning," which exhibited sometimes the beautiful coruscations of the aurora borealis.

The mean direction of this wind in New South Wales is from the north-west, and its velocity sometimes exceeds a regular gale; occasionally it has a *ricochet* movement,

thus—
or appears produced by a rotation on a set of horizontal axes, thus—

There are no noxious gases in these hot winds, and they do not exercise any deleterious effect on the health of man: they bear some affinity to the hot winds experienced in the Mediterranean, in Egypt, Arabia, Persia, Bombay, and Mexico; but whether these all belong to a common system

of atmospheric circulation, or are caused in the several countries by local circumstances, it is not easy to decide authoritatively; and my own impression is, that the form, extent, and latitude of the regions where they prevail—the characteristics of the soil, and the quantity and nature of the vegetation, all exercise a powerful influence in the production of hot winds during summer.

A good idea of the climate of Australia may be formed from the following comparison:—

Station	Summer.	Winter.	Annual Mean.	Thermometrical Fluctuation.
Port Macquarie, classed with	Florence, Naples	Funchal	Tunis	Dublin.
Port Jackson, ditto	Avignon, Constantinople, Philadelphia, U.S.	Cairo	Messina	Paris.
Port Phillip, ditto	Baden, Marseilles, and Bordeaux	Palermo	Naples	Montpellier.

The summer represents that of western Europe, between 41° and 55° N. lat; the winter, that part of the Mediterranean between the coasts of Spain, Italy, France, and Algiers, extending to Tunis and Cairo. It is probable that the extension of cultivation, the pernicious custom adopted by Europeans, of burning the surface of the land, to obtain a new crop of grasses, and the extensive forest conflagrations caused by the carelessness of the aborigines in scattering fire, or by the friction of dry trees, have contributed to increase the mean annual temperature of Australia since its colonization.

Rapid growth, and early development of the intellectual as well as physical structure, characterize human life in New South Wales, especially among females. At fifteen, a girl possesses all the charms, and many of the graces, of womanhood; but it must be admitted, that at the age of thirty, her bloom has passed away, although the vigour of existence is unimpaired. The springs of life seem to attain a rejuvenescence in those arriving from Europe. Numerous instances occur of persons arriving in the colony at sixty, and upwards, who acquired new vigour, and attained a hundred years of age.

Although we are still ignorant of the almost recondite laws which govern the increase or decrease of life, I cannot but consider that the progressive augmentation of female over male births, the lesser proportion of female to male deaths, and the annually decreasing mortality of both sexes, as positive and convincing proofs of the adaptation of a climate for the dwelling-place of man. On this subject various

data will be found in the chapter on population. Between 1836 and 1846, the proportion of females to males had more than doubled. In the year 1844, the net increase of female births over the year 1843, was 7.81 per cent.; that of males, only 2.88 per cent. This indicates a *positive* increase. The *comparative* mortality is equally remarkable. In 1844, the deaths of *males*, in proportion to the whole male population, was one in 78; of *females*, only one in 89.24. In proportion to the births of males, the deaths of males was one in 3.62; whilst those of females was only one in 5.2. In 1844, the deaths were in the ratio of 32 to 100 births: in 1844, 27 deaths to 100 births. The relative annual mortality in New South Wales, from 1828 to 1840, one in 55.15: in 1841, one in 62.36: in 1842, one in 58.85: in 1843, one in 73.19: in 1844, one in 81.98. The average mortality in England is about one in 53. According to the official returns, the mortality of the colony has undergone an actual and relative decrease since 1842.

The proportions of the births to the deaths is very remarkable; there is not *one death to three births*; in England there are two deaths to three births.

According to the registered returns, which are not very perfect, the numbers of births in New South Wales were in the following proportions to the numbers of deaths:—

1846	332	} Births to 100 deaths.
1847	331	
1848	341	

In England, the proportion of births to deaths is not more than half of this.

The proportion of births and deaths throughout the year, to the whole population living at the end of it, was:—

In 1846, 36 births, 11 deaths }
 1847, 43 „ 13 „ } To 1,000 living.
 1848, 40 „ 12 „ }

In England, the births have averaged 32, and the deaths 22, to 1,000 living.

The rate of mortality in 1848 was 1 in 85. In England it is 1 in 47; in Canada, 1 in 49; in the United States, 1 in 37.

Colonel Tulloch, who has registered many valuable observations, connected with the health and duration of life at the different stations of the British army, informs me that he considers the salubrity of Australia quite on a par with that of the United Kingdom. For instance, the mortality of troops serving in the various garrisons of Great Britain and Ireland is about one-and-a-half per cent annually; and the casualties of *every denomination* of a regiment of the line, from the period of its embarkation from England, and during the whole of its service in the widely scattered posts of Australia, Van Diemen's Island, and New Zealand, is no more than one-and-a-half per cent. It may on these grounds be said that the mortality is less in Australia than in England.

I have been favoured by Colonel Tulloch with the following comparative statements of the mortality among the British troops serving in different parts of the empire. This table shews a great saving of life, during the last ten years. Other circumstances as well as climate, have their influence on the duration of the life of soldiers, such as the locality of the barracks, the employment of the troops, and the congregating of men in large masses.

Average Mortality per thousand of White Troops annually.

Colonies.	For 20 yrs. ending in 1836.	For 10 yrs. ending in 1846.
New South Wales	14	11
Windward and Leeward Islands	78 $\frac{5}{10}$	68 $\frac{7}{10}$
Jamaica	121 $\frac{3}{10}$	66 $\frac{9}{10}$
Gibraltar	21 $\frac{4}{10}$	10 $\frac{9}{10}$
Malta	16 $\frac{3}{10}$	14 $\frac{9}{10}$
Ionian Islands	25 $\frac{2}{10}$	15 $\frac{5}{10}$
Bermudas	28 $\frac{8}{10}$	29 $\frac{2}{10}$
Nova Scotia and New Brunswick	14 $\frac{7}{10}$	13
Canada	16 $\frac{1}{10}$	12 $\frac{6}{10}$
Newfoundland	14	9 $\frac{1}{10}$
St. Helena	34 $\frac{2}{10}$	15 $\frac{1}{10}$
Cape of Good Hope	13 $\frac{7}{10}$	13
Mauritius	27 $\frac{1}{10}$	24 $\frac{4}{10}$
Ceylon	69 $\frac{8}{10}$	41 $\frac{4}{10}$

In the year 1849 the ratio of mortality among the white troops in our different colonies, was as follows:—

In Australia, 8; British Guiana, 14.2; Trinidad, 33; Tobago, 98.6; Grenada, 12.3; St. Vincent's, 6; Barbadoes, 128.8; St. Lucia, 17.4; Dominica, 40.4; Antigua, 10.9; St. Kitt's, 19.4; Windward and Leeward combined, 68.4; Jamaica, 48.3; Gibraltar, 8.4; Malta, 30.1; Ionian Islands, 23.1; Bermuda, 8.4; Newfoundland, 10.3; Nova Scotia and New Brunswick, 19.7; Canada, 15.6; St. Helena, 8.4; Cape of Good Hope, 13.3; the Mauritius, 14.6; Ceylon, 21.5; Madras, 22.4; Bengal, 61.3; Bombay, 26.6.

Comparing the foregoing mortality with that of the troops in the United Kingdom, the superiority of the Australian climate will be manifest:—

Average Mortality per thousand of Troops employed.

United Kingdom.	For 7 years previous to 1836.	For 10 yrs. ending in 1846.
Household Cavalry	14 $\frac{3}{10}$	11 $\frac{1}{10}$
Dragoon Guards and Dragoons	14 $\frac{3}{10}$	13 $\frac{7}{10}$
Foot Guards	21 $\frac{6}{10}$	20 $\frac{4}{10}$
Regiments of the Line	18 $\frac{5}{10}$	17 $\frac{9}{10}$

The maladies to which flesh is heir assume a milder type in Australia than in Europe; and it cannot be said that there are any endemic complaints. The diseases most prevalent in the six principal gaols of the colony in 1848, were—those of the brain and nerves, 75; circulatory organs, 20; respiratory organs, 154; alimentary canal, 282; hepatic, 9; eyes, 63; skin, 35; cellular texture, 28; fevers, 10; rheumatic, 84; dropsy, 1; scorbutic, 31; ulcers, 85; pregnancy and parturition, 6; wounds and accidents, 36; hernia, 1; teeth, 11; vermin, 25; other diseases, 119; children, 31. Total, 1,158. The deaths during the year were—males, 13; females, 1. Total, 14. I venture to say, that in none of the hospitals attached to any of the gaols or poor-houses in England, would 1,158 cases of disease similar to the above be treated so successfully. No cases of Asiatic cholera have occurred in Australia. Different forms of mania have presented themselves within the last few years, and the malady is increasing in New South Wales.

It would be very desirable if the excellent hospitals which exist at Sydney, Paramatta, and other towns, would publish periodical statements of the number and description of the different diseases treated, and of the mortality in each establishment. This would form a striking corroborative proof of the remarkable salubrity of the Australian climate.

CHAPTER III.

POPULATION OF NEW SOUTH WALES—FREE AND BOND, PROGRESSIVE AUGMENTATION SINCE 1788, STATE OF RELIGION, EDUCATION, AND CRIME.

THIS territory, when first occupied by the British, on the 26th January, 1788, was thinly peopled by a dark-coloured race of aboriginal tribes, whose appearance, character, manners, and customs will be described in a subsequent portion of this work. In the present chapter, therefore, attention will be directed to the numbers and condition of the Anglo-Saxon Australians in New South Wales.

The six transports which sailed from England, 13th May, 1787, for the foundation of the colony of New South Wales, contained the embryo from which the present population of the province, aided by immigration, has been formed. The transport, *Alexander*, contained 210 men convicts; the *Scarborough*, 210 ditto; the *Friendship*, 80 men, and 24 women, convicts; the *Charlotte*, 100 men, and 24 women, convicts; the *Prince of Wales*, 100; and the *Lady Penrhyn*, 102 women convicts. Total, 608 male, and 250 female convicts. Two convicts on board the *Alexander* received a pardon before sailing. The grand total which sailed was stated to be 828. A guard of marines was placed on board of each ship, and numbered, with officers, 212. There were twenty-eight women—wives of marines (who were to form the garrison of the new colony), carrying with them seventeen children. Emigration from England was studiously discouraged for several years; but owing to the number of convicts sent out, and the fineness of the climate, the population rapidly increased. According to a parliamentary return of 1812, the state of the colony in 1810 was—(1). Civil department, victualled, men, 37; women, 1; children, 3: (2). Military department, men, 1,416; women, 219; children, 414: (3). Free persons, victualled, men, 307; women, 183; children, 198: (4). Prisoners, victualled from the public stores, men, 1,132; women, 151; children, 154:—total number victualled from public stores, 4,277: (5). People *not* victualled from public stores, men, 1,906; women, 1,644; children, 1,938: settlers *not* victualled from public stores, men, 715; women, 22. Total number of souls in the settlement, 10,452.

The early censuses are said to be incomplete. The increase has been as follows:—

Year.	Population.	Year.	Population.
1788	1,030	1833	60,861
1810	10,452	1836	77,096
1821	29,783	1841	120,856
1828	36,598	1846	154,534

The estimate to 31st December, 1848, is 220,474. The number of inhabitants, (including the Port Phillip district,) may now be quoted, in round numbers, at a quarter of a million.

In a return laid before the Legislative Council of New South Wales by the able colonial secretary, Mr. Deas Thompson, on the 12th June, 1849, and by Mr. Mansfield's analysis of the census of 1841, the increase of the population, male and female, since 1821, is thus shewn:—

Years.	Adults.		Children.	Total.
	Males.	Females.		
1821	21,693	8,090	Not separated.	29,783
1828	27,611	8,987		36,598
1833	44,688	16,173		60,861
1836	87,298	43,558		130,856
1839	63,784	21,998	28,604	114,386
1840	70,021	25,476	33,966	129,463
1841	75,474	33,546	40,649	149,669
1842	76,528	35,762	47,599	159,889
1843	76,147	35,474	53,920	165,541
1844	74,912	36,170	62,295	173,377
1845	74,951	36,223	70,382	181,556
1846	82,847	42,287	71,570	196,704
1847	83,572	41,809	79,628	205,009
1848	86,302	44,562	89,610	220,474

The progressive augmentation of the female population will be perceived from the foregoing table; this did not arise solely from female emigration, but from the large proportion of female to male births—a proportion which I observed in Australia pervaded the whole range of domestic animals. It seems to be a law of population, that where there is room in a new country, and the command to “increase and multiply” is not perverted by polygamy, there is always a larger proportion of *female* than male births; but in an old established country, fully peopled, a check is put to an injurious increase by a

greater proportion of male than female births. Under a system of slavery there is also a preponderance of male over female births; from which it naturally results that a slave or bond population, if unrecruited by fresh supplies, would in process of time become extinct.

What proportion of the population of New South Wales consisted of convicts and of their descendants it is not possible to state. The number of convicts annually sent from Great Britain to New South Wales, from 1787 to 1843, was—

Years.	Males.	Females.	Total.
1787	184	100	284
1789	994	245	1,239
1791	2,121	286	2,407
1792	314	54	368
1793	1	—	1
1794	35	59	94
1795	1	131	132
1796	206	—	206
1797	313	67	380
1798	395	—	395
1799	—	53	53
1800	503	90	593
1801	203	94	297
1802	543	130	673
1803	494	136	630
1805	1	118	119
1806	272	34	306
1807	189	113	302
1808	202	175	377
1809	200	62	262
1810	200	120	320
1811	400	99	499
1812	400	167	567
1813	500	119	619
1814	800	232	1,032
1815	693	101	794
1816	1,186	101	1,287
1817	1,040	101	1,141
1818	1,912	128	2,040
1819	1,421	148	1,569
1820	1,726	121	1,847
1821	946	171	1,117
1822	856	57	913
1823	491	119	610
1824	1,004	81	1,085
1825	602	59	661
1826	844	88	932
1827	1,401	260	1,661
1828	1,732	298	2,030
1829	2,278	220	2,498
1830	1,751	337	2,088
1831	1,605	250	1,855
1832	1,992	206	2,198
1833	2,310	420	2,730
1834	2,336	144	2,480
1835	2,146	298	2,444
1836	2,029	259	2,088
1837	1,734	140	1,874
1838	1,716	344	2,060
1839	1,096	143	1,239
1840	575	213	788
1843	199	—	199
Total . . .	47,092	7,491	54,383

It appears that during a period of forty-eight years the number of convicts sent to New South Wales was, of males 43,506, of females 6,791: total 50,297. This is exclusive of convicts sent to Van Diemen's Island, to which separate transportation commenced in 1817, and from that year to 1837 the number of convicts sent to that island was, males 24,785, females 2,974: total 27,759; making a grand total deported to Australasia during the period, of males 68,291, females 9,765 = 78,056.

Transportation to New South Wales, except the deportation of a few exiles from Pentonville and other places, ceased in the year 1839, and the total number of convicts transported to that settlement may be stated in round numbers at, males 52,000, females 8,706 = 60,706. The convict population is thus stated since 1820:—

Years.	Males.	Females.	Total.
1820	18,067	2,189	20,256
1833	21,845	2,698	24,543
1836	25,254	2,577	27,831
1841	23,844	3,133	26,977
1846	9,653	902	10,555

The proportion of free to bond population, of each sex and age, in the colony is thus shewn in 1828 and 1833:—

Census.	Free Males.			Male Convicts.	Free Females.			Female Convicts.
	Above 12 Years.	Under 12 Years.	Total		Above 12 Years.	Under 12 Years.	Total	
1828	10621	2835	13456	14156	4538	2936	7474	1513
1833	17542	5256	22798	21845	8522	4931	13453	2698

In 1834 the number of "emancipists" in the colony was about 16,000, and the remainder of the free population was about 21,000.

The country to which the several convicts belonged, is not stated for the entire period. From 1828 to 1836, those from Great Britain and Ireland were:—

	Males.	Females.	Total.
Great Britain . . .	17,876	2,194	20,070
Ireland	8,079	1,941	10,020

During the eight years ending 1836, the number of persons free by servitude was, males 7,788, females 1,363 = 9,151. Absolutely pardoned, males 62, females 2 = 68. Conditionally pardoned, males 543, females 22 = 565.

The following abstracts of the population on the 2nd March, 1846, in each of the Counties and Commissioners' Districts comprised within the Sydney or Middle District, shows the number of free and bond persons

of each sex, distinguishing those born in the colony, or arrived free from other places, and also the number of bond persons holding tickets of leave, in government employment, and in private assignment respectively:—

Counties in New South Wales.	Males Free.		Males Bond.			Females Free		Females Bond.			Totals.		
	Born in the Colony or arrived free.	Other free Persons.	Holding Tickets of Leave.	In Government Employment.	In private Assignment.	Born in the Colony or arrived free.	Other free Persons.	Holding Tickets of Leave.	In Government Employment.	In private Assignment.	Males.	Females.	General Total.
Argyle	1758	852	412	2	15	1650	200	16	—	6	3039	1872	4911
Bathurst.	1555	899	306	15	24	1418	148	18	2	6	2799	1592	4391
Bligh.	186	139	92	1	2	160	17	1	—	—	420	178	598
Brisbane.	488	278	153	1	16	430	37	2	—	1	936	470	1406
Camden	3347	1125	448	10	22	3081	251	25	—	14	4952	3371	8323
Cook	1282	570	128	137	5	1316	142	11	1	6	2122	1476	3598
Cumberland	32348	5345	1180	1138	231	30764	1957	209	234	132	40242	33296	73538
Durham	3112	916	409	2	31	2869	180	26	—	9	4470	3084	7554
Georgiana	325	239	60	—	13	285	31	—	—	—	637	316	953
Gloucester	1040	232	187	—	33	864	37	4	—	2	1492	907	2399
Hunter	466	186	41	1	1	453	39	3	—	—	695	495	1190
King	572	372	119	—	4	524	71	1	—	2	1067	598	1665
Macquarie	535	217	219	294	62	580	53	10	—	3	1327	646	1973
Murray	992	513	289	1	8	814	89	14	—	1	1803	918	2721
Northumberland	5036	1720	597	338	59	5035	473	62	1	14	7750	5585	13335
Phillip	229	143	54	—	6	179	27	1	—	2	432	209	641
Roxburgh	859	466	177	—	2	746	88	12	—	3	1504	849	2353
St. Vincent	748	340	186	—	34	744	41	8	—	1	1308	794	2102
Wellington	315	288	100	—	8	225	27	7	—	—	711	259	970
Westmoreland	597	322	72	1	3	519	54	6	—	1	995	580	1575
Stanley (Moreton Bay).	716	190	128	81	7	455	20	1	—	1	1122	477	1599
Auckland (Twofold Bay)	480	217	54	—	2	304	28	2	—	1	753	335	1088
Total	56986	15569	5411	2022	588	53415	4010	439	238	205	80576	58307	138883
Commissioners' Districts beyond the Limits of Location.													
Bligh	250	287	71	2	5	166	6	1	—	—	615	173	788
Clarence River.	541	242	71	—	15	337	18	1	—	—	869	356	1225
Darling Downs	245	236	64	4	3	100	4	—	—	2	552	106	658
Lachlan	799	583	176	2	9	577	50	2	—	—	1569	629	2198
Liverpool Plains	670	813	261	6	28	296	32	3	—	1	1778	332	2110
M'Leay River	144	99	71	6	20	111	12	1	—	2	340	126	466
Menaroo	757	447	104	7	6	554	32	4	—	5	1321	595	1916
Moreton Bay	87	95	39	—	3	42	2	—	—	—	224	44	268
Murrumbidgee	1003	648	160	1	8	717	52	2	—	1	1820	772	2592
New England	707	691	339	4	15	428	44	3	—	—	1756	475	2231
Wellington	373	464	119	2	11	205	23	1	—	1	969	230	1199
Total	5576	4605	1475	34	123	3533	275	18	—	12	11813	3838	15651
Total Population of the Middle District	62562	20174	6886	2056	711	56948	4285	457	238	217	92389	62145	154534

It will be perceived from the foregoing, that the free males born in the colony, or who have arrived free, are nearly equal in number to the same class of females—viz., 62,562 and 56,948; but that great disproportion of sex exists between the emancipist class—viz., 20,174 males to 4,285 females; also between the bond—viz., 9,653 males, and 912 females.

The total males to females in the colony, in 1846, was 92,389 males to 62,145 females. This difference is every year diminishing: and the laudable efforts of the Right. Hon. Sydney Herbert to afford to distressed sempstresses, and other impoverished women, a means of emigrating to Australia, must eventually benefit the colony. Whatever doubts may

be cast on this benevolent project, I have no fear that injury can accrue from the measure; for it is well known, generally speaking, that as men find in New South Wales “honesty is the best policy,” so also women, removed from the snares of vice and temptations which beset them at every step in England, find in New South Wales, that “virtue is its own reward;” and there are many instances of thorough reclamation of character in Australia of persons who, if they had remained at home, would have trodden with fearful rapidity the downward road to ruin.

The census of 1846, presents within the limits of location, the following comparison with those of 1841, 1836, and 1833:—

Counties.	1846.	1841.	1836.	1833.
Argyle	4911	3397	2417	2850
Bathurst	4391	2465	1729	3454
Bligh	598	546	376	..
Brisbane	1406	1560	1378	229
Camden	8323	6286	3161	2648
Cook	3598	2892	2052	1465
Cumberland	73538	58108	39797	35844
Durham	7554	6238	3208	3303
Georgiana	953	749	575	..
Gloucester	2399	1424	854	583
Hunter	1190	999	808	..
King	1665	598	544	..
Macquarie	1973	2409	1300	744
Murray	2721	2111	1728	510
Northumberland	13325	9975	5016	4606
Phillip	641	453	247	..
Roxburgh	3353	1520	1980	..
St. Vincent	2120	1762	592	445
Wellington	970	510	530	
Westmoreland	1575	619	579	1903
Stanley (Moreton Bay, &c.)	1599	2187	3858	1218
Auckland (Twofold Bay)	1088	..	..	..
Total	139891	106808	72,729	59,802

The census of 2nd March, 1846, of the Commissioners’ Districts beyond the limits of location, presents the following comparison with those of 1841, 1836, and 1833:—

Districts.	1846.	1841.	1836.	1833.
Bligh	788	No details.	No details.	Not occupied.
Clarence River	1225			
Darling Downs	658			
Lachlan	2198			
Liverpool Plains	2110			
M’Leay River	466			
Monaroo	1916			
Moreton Bay	268			
Murrumbidgee	2592			
New England	2231			
Wellington	1199			
Total	15651	9980	2968	—

The gross increase of population during the five years ending March, 1846, was, males, 27,471; females, 31,282 = 58,753. Increase per cent, during the same period, males, 31.46; females, 71.84 = 44.89. Centesimal proportion of the sexes:—in 1846, males, 60.53; females, 39.47 = 100; in 1841, males, 66.71; females, 33.29 = 100. The inequality of the sexes is undergoing a gradual correction. The proportion of females to 100 males was—1836, 30; in 1841, 50; in 1842, 59; in 1843, 60; in 1844, 63.

The number of free immigrants who arrived in New South Wales and Port Phillip since the formation of the colony is not ascertainable. Between 1828 and 1848, the numbers are imperfectly stated thus:—

Years.	Men.	Women.	Children.	Total.
1828	200	122	274	596
1829	306	133	145	564
1830	166	70	73	309
1831	189	98	174	457
1832	819	706	481	2,006
1833	838	1,146	701	2,685
1834	571	596	397	1,564
1835	551	644	233	1,428
1836	524	807	290	1,621
1837	1,769	1,138	1,365	4,275
1838	3,631	2,152	3,077	8,840
1839	5,843	3,719	3,796	13,358
1840	5,159	5,457	2,056	12,662
1841	—	—	—	—
1842	—	—	—	6,823
1843	—	—	—	2,558
1844	—	—	—	2,181
1845	—	—	—	496
1846	—	—	—	111
1847	—	—	—	6,563
1848	—	—	—	13,977

Between 1841 and 1847, viz., for seven years the immigrants who arrived in New South Wales, consisted of 9,210 English, 2,606 Scotch, and 20,896 Irish = 32,709. No emigrants were sent out to New South Wales, by her Majesty’s Emigration Commissioners from 1844 to 1846.

The census of the province taken on 2nd March, 1846, affords satisfactory evidence of the progress and position of the colonists, and furnishes an excellent basis for the statistical supplement which it is my intention to issue every seven years, in order that the value of the original work may be preserved unimpaired. The following details, when examined with the accompanying map, will, doubtless, prove interesting in this country to those who have friends and relatives in the colony.

514 POPULATION BY SEX AND AGE IN NEW SOUTH WALES—1846.

Convicts free by servitude, absolutely and conditionally pardoned, during 1847 and 1848.

Years.	Absolutely pardoned.			Conditionally pardoned.			Free by servitude.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1847	2	0	2	1,020	33	1,053	588	215	803
1848	6	1	7	2,226	66	2,292	275	77	352
Total.	8	1	9	3,246	99	3,345	863	292	1155

On the 2nd March, 1846, the total bond, or convict, population in the colony, was 10,565. During 1847 and 1848 there were freed 4,509, or more than 2,250 per annum. Allowing 2,000 for the number liberated during ten months of 1846, the total libera-

tions to the end of 1848 would be about 6,500, which, at that period, would leave 4,000 still in bond—a number that would be entirely obliterated in the years 1849 and 1850—when the whole population of the province would be free.

Number of Persons of each Sex and Age, in the Counties in the Sydney or Middle District, and in the Commissioners' Districts beyond the limits of Location, in 1846.

Counties.	Males.					Females.					Totals.		General Total.
	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and up-wards.	Under 7 Years.	7 and under 14.	14 and under 21.	21 and under 45.	45 and up-wards.	Males.	Females.	
Argyle	621	251	159	1587	421	620	220	153	755	124	3039	1872	4911
Bathurst	480	224	142	1624	329	516	211	128	655	82	2799	1592	4391
Bligh	59	22	9	295	35	54	23	13	81	7	420	178	598
Brisbane	169	46	30	595	96	175	49	27	203	16	936	470	1406
Camden	1088	585	356	2181	742	1103	506	312	1200	250	4952	3371	8323
Cook	413	272	168	868	401	454	271	147	468	136	2122	1476	3598
Cumberland	8617	4744	3135	18096	5650	8599	4717	3975	13430	2575	40242	33296	73538
Durham	1045	472	307	2157	489	1124	417	223	1148	172	4470	3084	7554
Georgiana	98	59	31	358	91	111	43	25	118	19	637	316	953
Gloucester	324	169	118	744	137	300	140	94	315	58	1492	907	2399
Hunter	143	84	64	267	137	163	94	45	156	37	695	495	1190
King	206	95	67	547	152	206	76	53	233	30	1067	598	1665
Macquarie	197	84	58	700	288	229	87	52	243	15	1327	646	1973
Murray	337	132	112	985	237	286	134	63	376	59	1803	918	2721
Northumberland	1719	881	509	3726	915	1761	862	517	2113	332	7750	5585	13335
Phillip	71	28	15	265	53	77	22	17	87	6	432	209	641
Roxburgh	294	127	72	789	222	262	119	93	319	56	1504	849	2353
St. Vincent	226	116	78	695	193	259	114	67	293	61	1308	794	2102
Wellington	91	26	17	469	108	86	26	18	111	18	711	259	970
Westmoreland	199	112	58	511	115	200	87	35	219	39	995	580	1575
Stanley, Moreton Bay	167	70	36	755	94	151	53	27	230	16	1122	477	1599
Auckland, Twofold Bay	143	49	34	446	81	97	43	18	130	47	753	335	1088
Total	16707	8648	5575	38660	10986	16833	8314	6102	22883	4175	80576	58307	138883
Commissioners' Districts, beyond the Limits of Location.													
Bligh	56	23	14	458	64	63	25	6	71	8	615	173	788
Clarence River	118	47	34	598	72	114	40	29	167	6	869	356	1225
Darling Downs	32	8	19	436	57	38	6	13	44	5	552	106	658
Lachlan	235	107	77	983	167	222	77	45	261	24	1569	629	2198
Liverpool Plains	117	55	77	1358	171	115	28	21	158	10	1778	332	2110
M'Leay River	37	10	21	225	47	41	13	11	60	1	340	126	466
Menaroo	222	82	93	765	159	202	78	44	233	38	1321	595	1916
Moreton Bay	11	2	6	191	14	17	1	1	25	—	224	44	268
Murrumbidgee	266	110	78	1175	181	250	90	69	335	28	1820	772	2592
New England	163	86	70	1273	164	152	55	37	216	15	1756	475	2231
Wellington	103	30	22	689	125	87	25	8	108	2	969	230	1199
Total	1370	560	511	8151	1221	1301	438	284	1678	137	11813	3838	15651
Total Population of Middle District, }	18077	9208	6086	46811	9572	18134	8752	6386	24561	4312	92389	62145	154534

MARRIED AND SINGLE IN NEW SOUTH WALES IN 1846. 515

Number of Married and Single Persons of each Sex in the Counties in the Sydney or Middle District, and in the Commissioners' Districts beyond the limits of Location in 1846 :—

Counties.	Males.		Females.		Totals.		General Total
	Married.	Single.	Married.	Single.	Males.	Females.	
Argyle	823	2,216	822	1,050	3,039	1,872	4,911
Bathurst	648	2,151	674	918	2,799	1,592	4,391
Bligh	86	334	86	92	420	178	598
Brisbane	218	718	217	253	936	470	1,406
Camden	1,424	3,528	1,369	2,002	4,952	3,371	8,323
Cook	555	1,567	530	946	2,122	1,476	3,598
Cumberland	13,090	27,152	13,319	19,977	40,242	33,296	73,538
Durham	1,260	3,210	1,256	1,828	4,470	3,084	7,554
Georgiana	124	513	130	186	637	316	953
Gloucester	370	1,122	352	555	1,492	907	2,399
Hunter	179	516	190	305	695	495	1,190
King	267	800	258	340	1,067	598	1,665
Macquarie	314	1,013	251	395	1,327	646	1,973
Murray	409	1,394	403	515	1,803	918	2,721
Northumberland	2,330	5,420	2,271	3,314	7,750	5,585	13,335
Phillip	96	336	93	116	432	209	641
Roxburgh	359	1,145	352	497	1,504	849	2,353
St. Vincent	348	960	336	458	1,308	794	2,102
Wellington	134	577	132	127	711	259	970
Westmoreland	249	746	248	332	995	580	1,575
Stanley (Moreton Bay)	251	871	237	240	1,122	477	1,599
Auckland (Twofold Bay)	185	568	173	162	753	335	1,088
Total	23,719	56,857	23,699	34,608	80,576	58,307	138,883
Commissioners' Districts beyond the limits of Location.							
Bligh	84	531	78	95	615	173	788
Clarence River	188	681	169	187	869	356	1,225
Darling Downs	68	484	55	51	552	106	658
Lachlan	309	1,260	292	337	1,569	629	2,198
Liverpool Plains	184	1,594	170	162	1,778	332	2,110
M'Leay River	67	273	61	65	340	126	466
Menaroo	250	1,071	259	336	1,321	595	1,916
Moreton Bay	21	203	23	21	224	44	268
Murrumbidgee	334	1,486	342	430	1,820	772	2,592
New England	226	1,530	223	252	1,756	475	2,231
Wellington	123	846	113	117	969	230	1,199
Total	1,854	9,959	1,785	2,053	11,813	3,838	15,651
Total Population of Middle District	25 573	66,816	25,484	36,661	92,389	62,145	154,534

Number of Married and Unmarried Persons in the City of Sydney and its Suburbs.

Name of City and Suburb.	County in which situated.	Males.		Females.		Totals.		General Total.
		Married.	Single.	Married.	Single.	Males.	Females.	
City of Sydney . . .	Cumberland . .	7,072	13,738	7,208	10,340	20,810	17,548	38,358
Balmain* . . .	Ditto . .	247	435	255	400	682	655	1,337
Camperdown* . .	Ditto . .	50	75	52	64	125	116	241
Canterbury* . .	Ditto . .	43	85	43	47	128	90	218
Chippendale* . .	Ditto . .	85	134	88	109	219	197	416
Glebe, the* . .	Ditto . .	210	323	212	310	533	522	1,055
Newtown* . .	Ditto . .	257	374	252	332	631	584	1,215
O'Connell Town* .	Ditto . .	8	17	8	7	25	15	40
Paddington* . .	Ditto . .	172	250	179	225	422	404	826
Redfern* . .	Ditto . .	177	260	183	245	437	428	865
St. Leonard's*† .	Ditto . .	74	149	74	115	223	189	412
Surry Hills* . .	Ditto . .	33	88	33	53	121	86	207
Total . .		8,428	15,928	8,587	12,247	24,356	20,834	45,190

Note.—The mark (*) attached to the name of any suburb indicates that it is situated on private property. This mark (†) includes the inhabitants of the Government Township of St. Leonard's, as well as the residents on the adjoining suburbs.

Number of Married and Unmarried Persons in the several Towns and Villages in New South Wales.

Name of Town or Village.	County in which situated.	Males.		Females.		Totals.		General Total.
		Married.	Single.	Married.	Single.	Males.	Females.	
Ailsa	Bligh	3	2	4	4	5	8	13
Albury	Unnamed	11	32	11	11	43	22	65
Appin	Cumberland	20	47	19	39	67	58	125
Bathurst	Bathurst	303	800	320	460	1,103	780	1,883
Berrima	Camden	79	178	54	66	257	120	377
Boyd*	Auckland	27	65	23	10	92	33	125
Braidwood	St. Vincent	40	79	40	47	119	87	206
Brisbane, North	Stanley	109	296	101	108	405	209	614
Brisbane, South	Ditto	70	139	67	70	209	137	346
Broulee	St. Vincent	3	6	3	10	9	13	22
Bungendore	Murray	4	15	4	7	19	11	30
Bungonia	Argyle	20	33	19	26	53	45	98
Camden*	Camden	40	100	40	62	140	102	242
Campbelltown	Cumberland	91	204	89	157	295	246	641
Carcoar	Bathurst	15	28	16	14	43	30	73
Clarence Town	Durham	14	36	14	29	50	43	93
Dalkeith*	Bligh	7	26	7	9	33	16	49
Dungog	Durham	22	47	21	34	69	55	124
Eden	Auckland	10	30	10	13	40	23	63
Gosford	Northumberland	10	25	11	7	35	18	53
Goulburn	Argyle	218	468	220	265	686	485	1,171
Gundagai	Unnamed	16	39	15	17	55	32	87
Gunning	King	20	40	20	15	60	35	95
Hartley	Cook	11	20	11	20	31	31	62
Haydonton*	Brisbane	17	57	21	22	74	43	117
Ipswich	Stanley	20	44	19	20	64	39	103
Kelso*	Roxburg	85	173	85	121	258	206	464
Liverpool	Cumberland	115	247	90	149	362	239	501
Macquarie	Macquarie	144	455	79	141	599	220	819
Maitland, East	Northumberland	152	337	150	271	489	421	910
Maitland, West*	Ditto	433	917	442	617	1,350	1,059	2,409
Merriwa	Brisbane	5	24	8	5	29	13	42
Montefiores*	Bligh	25	47	28	29	72	57	129
Morpeth*	Northumberland	120	214	125	176	334	301	635
Mudgee	Wellington	22	68	22	19	90	41	131
Murrurundi	Brisbane	11	24	9	8	35	17	52
Muswellbrook	Durham	42	81	40	45	123	85	208
Narellan	Cumberland	4	4	2		8	6	14
Newcastle	Northumberland	248	769	192	262	1,017	454	1,471
Nurea	Unnamed	9	14	10	11	23	21	44
Parramatta	Cumberland	612	1,649	787	1,406	2,261	2,193	4,454
Paterson	Durham	23	51	23	44	74	67	141
Penrith*	Cumberland	56	115	52	68	171	120	291
Petersham*	Ditto	23	43	22	34	66	56	122
Picton	Camden	24	48	23	25	72	48	120
Pitt Town	Cumberland	35	74	37	83	109	120	229
Queanbeyan	Murray	40	88	35	45	128	80	208
Raymond Terrace	Gloucester	45	100	44	74	145	118	263
Richmond	Cumberland	122	277	128	219	399	347	746
Scone	Brisbane	22	47	21	27	69	48	117
Singleton*	Northumberland	109	200	116	140	309	256	565
St. Alban's	Ditto	4	4	4	9	8	13	21
St. Aubin's*	Brisbane	27	30	22	24	57	46	103
Stockton*	Gloucester	18	48	18	28	66	46	112
Windsor	Cumberland	248	682	268	481	930	749	1,679
Wollombi	Northumberland	16	25	15	20	41	235	76
Wollongong	Camden	86	201	90	138	287	228	515
Yass	Murray and King	46	124	50	54	170	104	274
Total Population in Country Towns		4,171	10,036	4,216	6,319	14,207	10,535	24,742
Add City of Sydney and Suburbs .		8,428	15,928	8,587	12,247	24,356	20,834	45,190
Total Urban Pop. in N. S. Wales .		12,599	25,964	12,803	18,566	38,563	31,369	69,932

Note.—This mark (*) attached to the name of any suburb, town, or village, indicates that it is situated on private property

BIRTHS, DEATHS, AND MARRIAGES IN NEW SOUTH WALES. 517

Statement, showing the Increase of the Population by Births and Immigration respectively, in each year, from 1839 to 1848.

Years.	Gross Increase.		Total.	Gross Decrease.		Net Increase.	Population.
	Births.	Immigration.		Deaths.	Departures.		
1836	—	—	—	—	—	—	77,096
1837	2,270	7,700	9,970	1,799	—	8,171	85,267
1838	2,836	11,913	14,749	2,104	—	12,645	97,912
1839	3,304	15,651	18,955	2,481	—	16,474	114,386
1840	4,233	13,226	17,459	2,382	—	15,077	129,463
1841	5,204	19,938	25,142	2,894	2,998	19,250	149,669
1842	6,333	11,649	17,982	2,717	5,045	10,220	159,889
1843	7,182	5,493	12,675	2,293	4,730	5,652	165,541
1844	7,946	8,809	16,755	2,122	5,054	9,581	173,377
1845	8,522	5,968	14,490	2,128	4,183	8,179	181,556
1846	7,061	6,673	13,734	2,125	4,514	6,339	196,704
1847	8,881	6,563	15,444	2,688	4,474	8,282	204,986
1848	8,746	13,977	22,723	2,574	4,751	7,235	205,009
1849							
1850							

Marriages, Births, and Deaths, in New South Wale, since 1832.

Years.	Marriages.	Births.		Total.	Deaths.		Total.
		Males.	Fem.		Males.	Fem.	
1832	619	655	599	1,254	650	275	880
1833	698	769	791	1,560	850	345	1,150
1834	750	927	930	1,857	827	337	1,164
1835	744	931	872	1,830	990	463	1,453
1836	774	1,047	1,073	2,120	1,131	497	1,628
1837	916	1,159	1,111	2,270	1,217	582	1,799
1838	970	1,450	1,386	2,836	1,392	712	2,144
1839	1,157	1,678	1,626	3,304	1,609	872	2,481
1840	1,631	2,119	2,114	4,233	1,517	865	2,382
1841	1,924	2,631	2,573	5,204	1,750	1,144	2,894
1842	2,564	3,160	3,173	6,333	1,753	964	2,717
1843	1,831	3,689	3,493	7,182	1,446	847	2,293
1844	1,813	3,999	3,947	7,946	1,362	760	2,122
1845	1,837	4,338	4,184	8,522	1,245	883	2,128
1846	1,796	3,529	3,532	7,061	1,321	804	2,125
1847	1,852	4,536	4,345	8,881	1,646	1,042	2,688
1848	1,801	4,484	4,262	8,746	1,584	990	2,574
1849							
1850							
Total.	23,677	41,101	40,011	81,139	22,290	12,382	34,622

By the last census of 1846, the population of New South Wales and of Port Phillip, was as follows :—

	Males.	Females.	Total.
Within limits of Location—			
Middle District	80,576	58,307	138,883
Port Phillip District	13,234	10,234	23,468
Beyond limits of Location—			
Middle District	11,813	3,838	15,651
Port Phillip District	6,950	2,461	9,411
Crews of colonial vessels . . .	2,196	—	2,196
Total	114,769	78,840	189,609
Population of 1841	87,298	43,558	130,856
Increase	27,471	31,282	58,573
Centesimal increase during } the same period	31.46	71.81	44.89
Average annual centesimal in- } crease for same period	6.29	14.36	8.98
Centesimal proportion of } 1846 the sexes } 1841	60.53	39.47	100
	66.71	33.29	100

From the 1st January to 31st December, 1848, the two districts of New South Wales and Port Phillip presented the following results :—

	Male.	Female.	Total.
Increase by—			
Immigration	8,452	5,525	13,977
Births	4,484	4,262	8,746
Total increase	12,936	9,787	22,723
Decrease by—			
Deaths	1,584	990	2,574
Departures	3,534	1,217	4,751
Total decrease	5,118	2,207	7,325
Summary—			
Total increase	12,936	9,787	22,723
Total decrease	5,118	2,207	7,325
Net increase	7,818	7,580	15,398
Population, Dec. 31, 1847	123,890	81,119	205,009
" Dec. 31, 1848	131,708	88,699	220,407

According to the census of 1846, the classification of occupations showed—commerce, trade, and manufactures, 9,264; agriculturists, 13,952; grazing shepherds, 13,565; stockmen, &c., 5,532; horticulture, 943; other labourers, 12,104; mechanics and artizans, 10,769; domestic servants, males, 4,181, females, 6,455; clerical profession, 185; legal, &c., 271; medical, 343; other educated persons, 1,737; alms-people, pensioners, paupers, &c., 1,687; all other occupations, 7,816; residue of population, 98,602 = 187,413.

The places where born were thus noted :—
In the colony, males, 27,361; females, 27,492 :

England, males, 33,756; females, 13,493: Wales, males, 364; females, 177: Ireland, males, 22,445; females, 15,976: Scotland, males, 6,409; females, 3,970: other British dominions, males, 1,153; females, 752: foreign countries, males, 901; females, 285.

The dwellings of the inhabitants were thus classified in 1846:—Houses of stone or brick, 9,955; wood, 16,511; shingled, 17,012; slated, 500. Total, 26,563. Inhabited, 24,848. Of the latter, the county of Cumberland, containing Sydney, has 12,939 houses.

RELIGION.—According to the census of 1836, there were—of Protestants, 77,096; of Roman Catholics, 21,898; Jews, 477. Judge Burton states, that in 1836, among the convicts, 18,500 were Protestants, 9,000 Roman Catholics, and 331 Jews. In 1846,

the religious denominations of the inhabitants of New South Wales, alone, was:—Church of England, 79,801; Church of Scotland, 16,053; Wesleyans, 6,338; other Protestants, 3,681; Roman Catholics, 47,187; Jews, 969; Mahomedans and Pagans, 135; other persons, 361. For the year ending 31st December, 1848, there were:—

Religious Denominations.	Births.	Marriages.	Deaths.
Church of England .	3,790	720	1,405
Church of Scotland .	930	504	225
Wesleyan Methodists	483	77	81
Independents . . .	85	27	29
Baptists	32	5	8
Roman Catholics . .	3,387	462	812
Jews	39	6	14
Totals	8,746	1,801	2,574

Persons of each of the under-mentioned Religious Denominations, on 2nd March, 1846.

Counties.	Church of England.	Church of Scotland.	Wesleyan Methodists.	Other Protestants.	Roman Catholics.	Jews.	Mahomedans and Pagans.	Other Persuasions.	General Total.
Argyle	2,334	622	64	26	1,797	59	2	7	4,911
Bathurst	2,013	466	380	40	1,464	23	4	1	4,391
Bligh	297	48	—	7	245	—	—	1	598
Brisbane	792	170	8	7	426	1	2	—	1,406
Camden	4,250	1,007	321	62	2,629	24	19	11	8,323
Cook	2,074	272	183	10	1,036	12	6	5	3,598
Cumberland	38,344	6,458	3,696	2,857	21,216	688	32	247	73,538
Durham	3,867	1,417	313	76	1,862	10	2	7	7,554
Georgiana	448	136	5	3	361	—	—	—	953
Gloucester	1,396	387	99	14	500	1	2	—	2,399
Hunter	783	64	40	1	299	2	—	1	1,190
King	821	89	10	14	730	1	—	—	1,665
Macquarie	1,136	222	43	27	519	20	3	3	1,973
Murray	1,290	328	4	26	1,043	24	4	2	2,721
Northumberland . .	6,849	1,301	817	152	4,117	53	8	38	13,335
Phillip	356	88	2	—	191	1	3	—	641
Roxburgh	1,231	311	64	28	717	1	1	—	2,353
St. Vincent	943	377	5	6	766	3	1	1	2,102
Wellington	590	61	9	4	305	—	—	1	970
Westmoreland . . .	619	144	136	3	672	1	—	—	1,575
Stanley, Moreton Bay	770	209	24	57	497	9	22	11	1,599
Auckland, Twofold Bay	577	152	6	19	328	5	—	1	1,088
Total	71,780	14,329	6,229	3,439	41,720	938	111	337	138,883
Commissioners' Districts beyond the Limits of Location.									
Bligh	368	165	6	1	243	1	2	2	788
Clarence River . .	760	119	15	15	300	2	12	2	1,225
Darling Downs . .	341	128	—	2	178	1	6	2	658
Lachlan	956	190	14	21	1,010	6	1	—	2,198
Liverpool Plains . .	1,175	188	10	106	625	2	—	4	2,110
M'Leay River . . .	303	26	2	1	127	1	—	6	466
Monaroo	899	194	10	15	784	13	—	1	1,916
Moreton Bay	111	58	2	2	95	—	—	—	268
Murrumbidgee . . .	1,401	218	29	46	893	3	—	2	2,592
New England	1,147	326	17	30	703	—	3	5	2,231
Wellington	569	112	4	3	509	2	—	—	1,199
Total	8,030	1,724	109	242	5,467	31	24	24	15,651
Total Pop. of New South Wales . . }	79,810	16,053	6,338	3,681	47,187	969	135	361	154,534

The ecclesiastical establishment for 1848 was: *Church of England*.—Diocese of Sydney, forty-two rectors or ministers, with salaries averaging £200 per annum, and, in almost every instance, a parsonage (or an allowance of £50 a-year), and also a glebe of forty acres.

Diocese of Newcastle.—Sixteen rectors or ministers, with salaries and allowances as in the Sydney diocese. There are two ministers beyond the settled districts, with £200 a-year each.

Church of Scotland.—Seventeen ministers, with salaries averaging £150 a-year each, and, in several instances, a house and glebe.

Wesleyan.—Nine ministers, with each £150 or £200 a-year, and a house. No glebe.

Independent.—Five ministers; salary, £170 to £250; in one instance a house and glebe.

Baptist.—One minister; salary, £250.

Church of Rome.—Twenty-five ministers of religion, with salaries averaging £200 a-year, and, in some instances, a house, but no glebes.

Jews.—One minister; salary, £100 per annum.

There are now nine Episcopalian Lutheran churches in and near Sydney, two Presbyterian, one Free Church, one Wesleyan, one Baptist, one Congregational, one Friends (Quakers), one Bethel Mariners, four Roman Catholic chapels, and one Jewish synagogue. There are ministers of the Established Church at Paramatta, Hunter's hill, Prospect, Liverpool, Marsfield, Campbelltown, Narellan and Cabramatta, Camden, Mulgoa, Windsor, Richmond, Pitt Town and Wilberforce, Penrith, Castlereagh, Berrima, Hawkesbury, Goulbourn, Yass, Braidwood, Bathurst, Illawarra, Newcastle, Maitland, Port Macquarie, Wellington, Seaham, Marengo, New England, and sixteen other places.

Expense of Ecclesiastical Establishment in 1848.

Denominations.	Paid from Colonial Treasury.		Paid from Military Chest for Convict Service.	Total.
	Salaries.	Churches etc.		
	£	£	£	£
Church of England	15,204	3,726	655	19,585
Presbyterian . . .	2,614	400	25	3,039
Wesleyan	862	..	..	862
Roman Catholics .	6,670	3,388	66	10,124
Grand Total . . .	25,352	7,514	746	33,610

EDUCATION is in progress, and much needed. According to the census of 1846, there were

then, under twenty-one years of age, who could not read, males, 18,568; females, 18,035: read only, males, 5,480; females, 6,159: read and write, males, 9,323; females, 9,078. Above twenty-one years of age, cannot read, males, 14,245; females, 7,160; read only, males, 7,150; females, 6,209; read and write, males, 37,623; females, 15,504.

Public or Free Schools in 1848.

Denomination.	Number of Schools.	Scholars.		
		Male.	Female.	Total.
Church of England—				
* Orphan Schools . . .	2	96	110	206
* Schools established prior to 1837 . . . }	32	1,566	1,259	2,825
+ Ditto according to regulation of 1841 }	35	1,462	1,230	2,672
+ Presbyterian	43	1,471	1,134	2,605
+ Wesleyan	16	196	527	723
Roman Catholic—				
* Orphan Institution .	1	61	73	134
* Schools prior to 1847	11	541	550	1,091
+ According to regulation of Sept. 1841 }	21	917	792	1,709
Totals . . .	161	6,310	5,675	11,965

Note.—The Schools marked thus (*) are supported by Government, and those marked thus (+) by Government and Voluntary Contributions.

There is a Sydney College with eighty students; a grammar school with forty-two scholars, and a "King's school," Paramatta, with thirty-six scholars. Of private schools, there are in Sydney district 223, with 3,510 males and 3,208 female scholars = 6,718.

The total sums paid from the Colonial treasury in 1848, for education in New South Wales (including the Port Phillip district), was £13,540.

THE PRESS.—About twelve newspapers and periodicals. These publications are well conducted, and exhibit a liberal spirit and talent equal to the provincial press of any portion of the United Kingdom. The *Sydney Herald*, *Chronicle*, *Colonist*, and *Gazette*, are published three times a-week; the *Monitor*, six times a week; the *Commercial Journal*, twice, and the government *Gazette*, once a-week. There is an excellent subscription library and reading-room, at Sydney; an Australian museum and botanic garden, a Floral and Horticultural Society, and a Mechanics' School of Arts. There are agricultural societies in different parts of the colony; also reading-rooms and libraries; and in no part of the British Empire is there a greater desire for the extension of education, and the acquiring of useful information

520 CRIME IN NEW SOUTH WALES, AND EXECUTIONS, 1829—1849.

CRIME.—In the section on transportation I have adverted to the fearful neglect of the home and local government, from 1788 to 1836, of the spiritual wants of the many thousand criminals deported during that period from the United Kingdom to Australia. At New South Wales, at Van Diemen's Land, and at Norfolk Island, crime had reached its highest pitch about the years 1835-6. Extreme severity towards the prisoners, a neglect of the ordinances of religion, the flooding of the colony with criminals, without a due admixture of a free and untainted population, and the absence of any other mode of punishment in New South Wales for felons convicted there, except by deporting them to an earthly pandemonium at Norfolk Island, had produced a dreadful amount of sin in New South Wales. The Rev. Mr. M'Encroe, who attended seventy-four executions in New South Wales in four years, stated, that the greater number of the criminals, on their way to the scaffold, "thanked God that they were not going to Norfolk Island." Several of the prisoners there committed suicide, rather than live among the demons in human form by whom they were surrounded.

All this, however, distressing as it is, and disgraceful, in the highest degree, to those who, directly or indirectly, sanctioned the

continuance of such a barbarous system, appears to me no just argument against penal settlements, provided always they be judiciously regulated. To condemn "transportation" as a secondary punishment, because of the neglect of the positive and responsible duties of government towards a penal colony for forty years, is unreasonable; and if space be afforded me, at the close of this work, a chapter will be devoted to the examination of this important subject—important on many accounts—from the abolition of capital punishments for every offence, except murder; and by reason of the heavy expense attendant on the maintenance of a large prison population at home; the competition of their forced labour with that of the free and struggling citizens; the difficulty of accomplishing a prison reformation; and the almost utter impossibility of a man tainted with crime, and known to have been in a prison, being enabled to gain an honest livelihood in England. For the present, my duty consists in ascertaining the existing state of crime in New South Wales, and how far it has diminished of late years. The following statement extends over a period of twenty years; at the commencement of the period, the population was about 36,000; at its termination, about 200,000:—

Number of Convictions in the Supreme Court and Courts of Quarter Sessions, and the Number of Executions in the Colony.

Year.	Supreme Court.		Quarter Sessions.		Criminals Executed.				
	Felonies.	Misdemeanors	Felonies.	Misdemeanors	Protestants.		Roman Catholics.		Total.
					Free.	Bond.	Free.	Bond.	
1829	244	29	—	—	4	24	6	18	52
1830	269	6	—	—	6	16	7	20	49
1831	205	29	—	—	3	10	3	16	32
1832	225	2	—	—	1	1	1	9	12
1833	219	11	—	—	1	9	6	15	31
1834	272	11	—	—	—	22	—	20	42
1835	256	1	—	—	2	15	4	18	39
1836	168	4	—	—	2	14	3	7	26
1837	177	12	—	—	1	4	5	2	12
1838	199	18	—	—	2	6	1	10	19
1839	159	12	609	132	3	8	—	11	22
1840	99	9	565	161	1	6	—	1	8
1841	159	20	468	106	2	8	3	2	15
1842	135	41	536	85	3	2	2	3	10
1843	146	34	418	48	1	3	—	2	6
1844	199	22	331	48	1	7	—	—	8
1845	198	15	303	51	—	1	2	—	3
1846	180	11	350	77	—	—	1	—	1
1847	176	10	281	61	—	—	3	1	4
1848	189	68	269	45	4	—	5	—	9
Total .	3,864	365	4,130	814	37	156	52	155	400

Note.—The Quarter Sessions returns from 1829 to 1838, both inclusive, not rendered, or inaccurate.—Of the criminals executed, there were in the years 1830, one pagan; 1834, two faith uncertain; 1835, one pagan; 1841, two aborigines; 1842, one Jew and two aborigines; 1843, three aborigines; 1847, three aborigines

Notwithstanding the five-fold increase of population, and the large mass of criminals poured into the colony from 1829 to 1840, the diminution of crime is very remarkable. In 1839, the convicted felonies amounted to 768; ten years after, in 1848, they were only 458. In 1829, capital punishment was inflicted in fifty-two instances; twenty years after (1848) there were only nine. During the first ten years of the period under review, the number of executions amounted to 276; during the ensuing ten years, they were no more than ninety-seven. There is a singular fact connected with this record of capital punishments, which I have carefully collated from the annual returns in the "Blue Books" transmitted by the governor to her Majesty's secretary of state for the colonies, and that is, the number of protestants—compared with Roman catholics—who have perished by the law for their crimes, viz., 193 to 207; the proportion of the free to the bond, was 89 to 311.

The offenders convicted in the supreme court of New South Wales during 1848, were—

Offences.	Sydney.	Circuit.	Melbourne.
FELONIES:—			
Murder	3	2	1
Manslaughter	2	3	2
Shooting at, &c.	1	—	6
Robbery	—	—	8
„ with violence	1	6	—
Rape	2	4	—
Abduction	1	—	—
Burglary, &c.	2	1	2
Housebreaking	1	—	1
Receiving stolen goods	2	—	—
Stealing in a dwelling-house	—	3	5
Larceny	4	3	5
Forgery and Uttering	8	8	13
Piracy	6	—	—
Horsestealing	8	10	9
Sheep-stealing	—	1	—
Cattle-stealing	—	8	—
Other Offences	—	1	—
Total Felonies	41	50	52
MISDEMEANOURS:—			
Assaults	5	6	10
Riot and Assault	—	—	15
Subornation of Perjury	1	—	—
Bribery	—	—	1
Conspiracy	23	—	—
Fraudulent Insolvency	2	—	—
Obtaining Money under } False Pretences	1	1	1
Uttering Base Coin	—	—	—
Neglect escape	—	—	1
Total Misdemeanours	32	7	28
Total Capital Convictions	2	3	1

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The executions for the undermentioned offences during the year 1848, were—

Religion.	Murder.	Rape.
Protestants, free	2	2
Roman Catholics, free	1	—
Total	3	2

On comparing this return with the parliamentary paper, No. 410, laid before the House of Commons 21st May, 1838, I find that the criminal convictions before the supreme court, during the year 1835, amounted to 685, of whom 19 were for murder; 17 for attempting ditto; 1 for manslaughter; 13 for rape; 2 arson; 15 forgery; 82 bushranging, highway robbery, &c.; 67 cattle, horse, and sheep-stealing; 15 burglary; 3 perjury; 347 larceny, receiving known stolen property, &c.; and 87 for misdemeanours and assault. The total numbers committed for trial during the year 1835, (the last year given in the return), was 959 males, and 123 females, of whom 685 were convicted, 309 acquitted, 53 not prosecuted, and 35 admitted to bail; 86 received sentence of death, 368 transportation, and 162 were sent to hard labour, &c. A comparison of this return with that of 1848, must certainly be a matter of satisfaction to the colonists of New South Wales.

The convictions at the courts of Quarter Sessions in Sydney, Paramatta, Goulbourn, Bathurst, and Maitland, during the year 1848, were—

Felonies.—Burglary, 4; housebreaking, 7; stealing in a dwelling-house, 8; highway robbery, 1; robbery, 10; ditto, armed, 1; stealing from the person, 26; assault with intent to rob, 9; larceny, 156; receiving stolen property, 3; embezzlement, 1; abduction, 1; horse-stealing 7; cattle-stealing, 3; malicious wounding cattle, 1; suffering to escape, 1. Total, 269: viz.—Sydney, 150; Paramatta, 44; Goulbourn, 10; Bathurst, 15; Maitland, 50.

Misdemeanours.—Assaults with various intents, 25; assault and false imprisonment, 1; attempting to commit felony, 3; obtaining money or goods by false pretences, 5; uttering counterfeit coin, 3; having ditto in possession, 1; attempting to dissuade a witness from giving evidence, 1; keeping a common gaming-house, 1; rescuing cattle, &c., 4; being an incorrigible rogue, 1. Total, 45: viz.—Sydney, 28; Paramatta, 6; Goulbourn, 3; Bathurst, 1; Maitland, 7.

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The returns for the Gaols and House of Correction, New South Wales, for the year 1848, are as follows:—

Gaols.	Total Admissions of Whites, in 1848.		Total.	Felons.				Misdemeanours.			
				Tried.		Untried.		Tried.		Untried.	
	Males.	Fem.		Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.
Sydney	1,217	348	1,565	111	13	16	2	50	33	18	4
Paramatta	162	96	258	22	4	5	5	11	7	1	2
Goulbourn	34	5	39	10	—	4	—	8	—	—	—
Bathurst	67	35	102	17	3	1	—	3	3	—	—
Newcastle	—	—	—	3	—	10	2	17	2	—	—
Port Phillip	—	—	—	39	1	4	1	45	11	—	—
Total	1,480	484	1,964	202	17	40	10	114	56	19	6

Note.—The return of felons is at Michaelmas, 1848. The admissions into Newcastle and Port Phillip gaols not stated.

The prisons are under the jurisdiction of the sheriff of the colony, and the superintendence of a stipendiary visiting magistrate and principal gaoler. Any of the magistrates may visit the gaol.

In the Sydney gaol there are 108 sleeping cells, and twenty-two solitary cells, none of which are dark or below ground. The classification directed by the gaol regulations has been observed. The chaplains of the church of England and of the church of Rome, appointed by the governor, perform divine service twice on Sundays, and once during the week. They also frequently visit and instruct the prisoners. Bibles, and other religious books are supplied. Dissenting ministers are admitted on the same terms as the ministers of the church of England and of Rome. Attached to the prison are two hospitals—one for male, and the other for female prisoners, who are under the care of the surgeon of the prison. The female prisoners are attended exclusively by female officers. The protestants and Roman catholics are continually kept apart. There is also a separation of hardened offenders from those imprisoned for the first time; also of the old from the young. The felon prisoners are kept at hard work, such as breaking or cutting stone. Whipping, or solitary confinement, is resorted to for breaches of gaol regulations: irons only in cases of urgent and absolute necessity. The other colonial gaols are similarly managed; and they will all bear a comparison with those of the United Kingdom.

To a great extent the colony is now purified from crime; and it appears by the documents laid before parliament, Jan. 31, 1850, that the colonists have declared, in a petition to the Queen, that “it is their duty and determination, by every legal and constitutional means, to oppose the revival of transportation.”

The civil causes tried in the supreme court of New South Wales, during 1848, were—

Name.	Juries of Four.		Juries of Twelve.		Total.
	De-fended.	Unde-fended.	Com-mon.	Special.	
Sydney	82	20	2	7	111
Circuit	13	2	—	1	16
Port Phillip	20	7	2	12	41
Total	115	29	4	20	168

There are just grounds for stating that New South Wales is more free from crime than could have possibly been expected by the most ardent philanthropist. It can be compared with several portions of the United Kingdom. It may not be irrelevant to quote in this place an unimpeachable testimony in behalf of a large portion of the present population of the colony, which reflects great credit upon them, and fully confirms the opinions which I expressed in my *History of the Colonies*, in 1834–5.

Mr. T. H. Braim, formerly of St. John's College, Cambridge, and now head principal of Sydney College, N.S.W., in his interesting *History of New South Wales to 1844*, thus speaks of the Australian youth:—

“Descended, as many of them have been, from parents whose names were stained by crimes against their country and their God; brought up under a fearfully imperfect mental training, a neglected moral cultivation, and either an entire omission, or at the best but an imperfect performance of the duties and ordinances of religion, they have yet risen superior to these disadvantages, have earned for themselves a good name, have reared families in honour and respectability, and are now themselves in the enjoyment of general esteem and confidence, and their children availing themselves of blessings placed within their reach, which their fathers knew not, are bearing upon them the buds of excellence.”

Of the emancipists, he says:—

“They form no uninteresting part of the population; feeling that they had a bad character to lose and

a good one to gain, they have in many instances set themselves about the work of reformation; some of them are reckoned among our most honourable tradesmen and merchants, among the most liberal supporters, too, of the various benevolent institutions which adorn our land (Australia). Some of these institutions have been all but entirely founded, and are now mainly supported by their means. In many cases they have, by their industry and perseverance, acquired considerable wealth; and in most instances the wealth thus obtained has been generously and honourably devoted to the public benefit, the real and substantial advancement of this land of their expatriation. Nor do we know a more pleasing trait in human character than that which is thus displayed; once degraded, they have paid to a violated law the satisfaction it imperatively demanded; but when the debt was paid another obligation was felt to remain behind. Society had lost that beneficial influence which each member is called upon to exercise, and to

atone for this was now their honourable desire. In the fair and honest pursuit of commerce, by untiring industry, they acquired those means which enabled them to gratify their wish—a competence—more, a profession—rewarded their patient toil; and no sooner was this poured into their lap, than they gave it back, spreading it through numerous channels, through each of which, as it flowed, it left blessings that even succeeding ages may enjoy. To say nothing of many public buildings, which are the chief architectural embellishments of our city, and which have been the result of their enterprise and zeal, we turn to some of those institutions of charity and benevolence which own them as their earliest supporters.”—[Vol. ii., pp. 315–16.]

A people of whom thus much can be truly said, are they not qualified for the enjoyment of free institutions?

CHAPTER IV.

EARLY AGRICULTURAL AND PASTORAL STATE OF NEW SOUTH WALES—STAPLE PRODUCTS, AGRICULTURE, LIVE STOCK, WOOL, TALLOW—PRICES AND WAGES—COMMERCE, IMPORTS AND EXPORTS—SHIPPING, &c.

AT the period of the formation of New South Wales, or during its early struggles, when the colonists were again and again on the eve of perishing of want, how strangely the prophecy would have sounded in men's ears, could it have been foretold, that in little more than half a century, the colony would not only produce a sufficient quantity of animal and vegetable food for the support of a quarter of a million Englishmen and their descendants; but that Australia should have, in that short time, become the greatest wool-exporting country in the world; her salubrious climate, and the pasturage of her virgin soil, rendering the increase of sheep and cattle so rapid, as to induce their owners to slaughter them in great numbers, merely for the sake of the tallow thus obtained.

The present condition of New South Wales is indeed surprising, and the statements which mark the different epochs of her progress, well deserve attention in an historical point of view; and scarcely less, from the evidence they afford of the energy and industry of the Anglo-Saxon race—an energy to which difficulty appears to lend fresh vigour, and an industry as unflagging in its appointed course as that of the earth round the sun.

To me, who have had for years my mind

saturated—if I may be allowed the expression—with the one vast subject of the British colonial empire, the task of collecting and compiling its astonishing records has been truly a labour of love. I have studied the history of each colony, and have found in each a peculiar interest—an individuality, as it were—that grows upon the mind which views them as parts of a whole; different in their construction, but not incongruous; on the contrary, well calculated, by their union, to strengthen each other. In this light, which I sincerely believe to be the true one, I would fain bring them before my readers; and although deeply sensible of the magnitude of the subject, and the difficulty of the attempt, yet that appears to me as the strongest possible reason for endeavouring to afford a correct idea of the relative proportion of each possession, which can scarcely be conveyed, except by a general description of the whole. For instance, if in teaching a child the geography of England, we were to show him delineations—however accurate—of a few of the counties, and barely mention the others, would he not form a very inaccurate (if, indeed, any clear notion at all) of the country, as a whole: and so it is with our colonial empire.

This, however, is a digression; to return

to New South Wales. The public stock landed at Sydney Cove with the first British settlers, in January, 1788 (see p. 403), consisted of 1 bull, 4 cows, 1 bull calf, 1 stallion, 3 mares, and 3 colts; there were also a few sheep. These were placed on a spot at the head of Sydney Cove, which was cleared for a farm, where the seeds, plants, and fruit-trees, brought from England, Rio de Janeiro, and the Cape of Good Hope, were carefully tended, under the anxious superintendence of the governor. In May, 1788, the governor directed every person in the settlement to make a report of the live stock in his possession, which the returns stated at 1 stallion, 3 mares, 3 colts, 2 bulls, 5 cows, 29 sheep, 19 goats, 49 hogs, 25 pigs, 5 rabbits, 18 turkeys, 29 geese, 35 ducks, 142 fowls, and 87 chickens. Scarcely a greater calamity could have befallen the colonists, than the destruction, at this period, by native dogs, of five ewes and a lamb. Added to this, several sheep died, in consequence of feeding on grass which the newly cut trees had shaded previously from the air and sun; hence a general belief that it would not be possible to rear this description of stock. In June, 1788, the settlement sustained a severe loss, by the neglect of a convict who had charge of the cattle—two bulls and four cows strayed into the woods near Sydney, and were not recovered—the *only remaining cow* became so dangerously wild, that it was found necessary to shoot her.

In 1790, the stock sent out by his Majesty's government in the *Guardian*, consisting of 7 horses, 16 cows, 2 bulls, a number of sheep, goats, and 2 deer, were killed when the ship struck on an iceberg near the Cape of Good Hope (see page 405.) In this year the stock had been previously diminished in a wanton manner (see page 405.) In session 1791 H.M.S. *Gorgon* arrived, to the great joy of the colonists, with 1 bull calf, 16 cows (3 bulls and 7 cows died on the passage), 68 sheep, 11 hogs, 200 fruit trees, and a quantity of garden seeds. At the close of this year the public live stock in the colony amounted to 3 stallions, 1 mare, 2 colts, 16 cows, 2 calves, 1 ram, 50 ewes, 6 lambs, 1 boar, 14 sows, and 22 pigs. The ground in cultivation at the Rose Hill government farm (Paramatta) consisted of 300 acres in maize, 44 in wheat, 6 in barley, 1 in oats, 2 in potatoes, 4 in vines, 86 in garden ground, and 17 in cultivation by the New South Wales corps.

In addition to these, there were 150 acres cleared, to be sown with turnips; ninety acres were in cultivation by settlers; twenty-eight by officers, civil and military, at and about Sydney and at Paramatta; 140 acres were enclosed, and the timber cleared for cattle; making a total of 920 acres of land thinned, cleared, and cultivated. So dense, however, was the forest around Sydney and Paramatta, that any one straying a mile from the huts was almost invariably lost; and in this way many convicts and soldiers perished.

In June, 1792, the *Atlantic* storeship brought from Calcutta two bulls, a cow, twenty sheep, and twenty goats, of the Bengal breed. In the October of the same year, nearly five years after the establishment of the colony, the whole of the ground in cultivation, both on account of the crown and of individuals, was—in wheat, 208½ acres; barley, 24¼; maize, 1,186½; garden-ground, 121¼: total, 1,640¾ acres. Ground cleared of timber, 162¼ acres. The quantity of land which had passed to settlers, under the seal of the colony, amounted to 3,470 acres, of which 470 were in cultivation, and the timber cleared from 100 more, ready for the sowing of grain. The stock belonging to the public, kept at Paramatta, consisted of 3 bulls, 2 bull calves, 5 stallions, 6 mares, 105 sheep, and 43 hogs.

The governor gave to each married settler one ewe for the purpose of breeding, and to others he gave such female goats as could be spared. Land was granted, conformably to instructions from the secretary of state. Non-commissioned officers and privates of the marines, desirous of remaining in the colony, in the proportion of 150 acres to a married non-commissioned officer; 130 acres to a single ditto; 100 acres to a married private; and eighty acres to a single man; and, on receiving their discharge, clothing, provisions for one year, seed, and agricultural implements were given to each settler. Each male convict, emancipated or discharged, received, if single, thirty acres; if married, thirty acres, and ten acres for each child. The policy of the government was, to establish a chain of farms between Sydney and Paramatta, fifteen miles distant, so that the country might be opened; which was subsequently carried out by extending lines of settlement to Windsor, on the Hawkesbury river, to Richmond, on the Nepean River, and other places, where cultivable land was found.

In 1793, of the stock which had been landed in the colony, there remained but three bulls, twenty-one cows, and seven calves. During the early stages of the settlement, it was noticed as a singular fact among the live stock, that the proportion born of males to females was about three to one. This, however, did not continue; the sexes soon became equalized, and then the number of female preponderated over the male births.

In January, 1794, one small cow and a Bengal steer, weight 372 pounds, (both private property,) were killed for the use of the troops, and sold to them at eighteen pence per pound. This was but the third time that the colonists had tasted fresh beef since their arrival in 1788, viz.—once soon after their landing, and a second time when the lieutenant-governor and officers of the settlement were feasted by the captain of a Spanish ship. In March, 1794, only one serving of salt meat remained in store, and that was to be the food of half a week. After that period, says Collins, "the prospect was truly discouraging; for mere bread and water appeared to be the portion of by far the greater part of the inhabitants of these unfortunate settlements—of that part, too, whose bodily labour must be called forth to restore plenty, and attain such a state of independence on the parent country, as would render delay or accident, in the transport of supplies, a matter of much less moment to the colony than it had ever hitherto been considered." Even a shark, caught in the harbour, yielded food to several; the oil procured from the liver sold at a shilling a quart; for but "very few houses in the colony were fortunate enough to enjoy the pleasant light of a candle."

The seed-wheat was untouched, and might remain so for a fortnight; but all the animals, public and private, were threatened with destruction, to supply food for 3,000 people. On 8th March, when the doors of the provision store were closed, and the convicts had received the last allowance which remained, a ship stood in for Port Jackson, but a gale of wind split her topsail, and she was driven to sea, to the dismay of the almost famishing inhabitants: at night the wind increased; and, during the ensuing day, nothing more was seen of the stranger. On the evening of the 9th, another sail (a brig) was in sight; but a second night of sleepless anxiety was passed, and the morning of the 10th dawned tempestuously: about three

o'clock, however, the wind changed, and the ship *William*, from Cork, with a cargo of beef and pork, and the *Arthur*, a small brig from Bengal, anchored that night in Port Jackson, and the 3,000 colonists were saved from a fearful death.

The home government now became conscious of the precarious supply of food obtainable for the convicts and settlers, and several vessels were despatched in succession to the colony, laden with all sorts of provisions; the live stock, public and private, was carefully preserved, and its numbers now were—mares, 11; stallions, 9; male asses, 4; female asses, 2; bulls, 15; cows, 25; ewes, 316; rams and wethers, 210; female goats, 352; male ditto, 170; hogs, several hundred. On the 1st of July, 1795, the colony was again reduced to straits; the salt provisions were all expended but a few casks reserved for the use of the troops, and on Saturday the 11th, there was no more animal food for the convicts; a greyhound was killed and its flesh sold for that of Kangaroo; but happily on the 26th of July, H.M.S. *Providence*, captain Broughton, arrived with supplies from England, and was followed by H.M.S. *Reliance* and *Supply*. On the 1st of September, 1796, the live stock in possession of government, and of the civil and military officers of the settlement, consisted of mares and horses, 57; cows and calves, 101; bulls and bull-calves, 74; oxen, 54; sheep, 1531; goats, 1,427; hogs, 1869. The cattle which had strayed from the settlement in the year 1788, were known to be wild, and to have largely increased in a fine district now termed the Cow Pastures, to the westward of the Nepean river. The number of acres in cultivation were 5,419, and the number of persons in the colony was 3,959. It is unnecessary to follow up this narrative of the pastoral and agricultural state of New South Wales; but it offers a striking contrast when compared with the two following tables, shewing the extent of cultivation in the colony, and its progress for the past twelve years; and the number of horses, horned cattle, sheep, and swine in each colony and district on the 1st January, 1849, when it appears there were, in cultivation with wheat, 63,463 acres, yielding 638,072 bushels of grain; 26,103 acres in maize, yielding 722,704 bushels; of oats, fifty-eight bushels. Altogether, upwards of 1,500,000 bushels, or nearly 200,000 quarters of grain is raised, furnishing a quarter annually for each inhabitant.

526LAND IN CULTIVATION AND PRODUCE N. S. WALES, 1837 to 1848.

There are no consecutive details concerning the grant, sale, and cultivation of land in the colony; some idea of the progress may be conveyed by the following general statement:—

Year.	Granted.	Cleared or Pastured.	Cultivated.
	Acres.	Acres.	Acres.
1810	95,637	81,937	13,700
1820	381,466	349,195	32,271
1825	673,699	127,878	45,514
1828	2,906,346	231,578	71,523
1833	4,014,117	—	—
1848	5,500,000	—	1636,69

There is less than one acre under crop to each mouth in the colony; but this yields sufficient vegetable food; for the total value of grain, flour, rice, and potatoes imported for use in 1848, was only about £35,000.

The “commissioners’ districts beyond the

settled districts,” to which reference is made in several tables, are those in which the squatters are located. The territory not included in the several counties is divided into districts, over each of which an officer called a commissioner of crown lands is appointed. He has under him a body of mounted constables or police, and his duty consists in preserving the peace of the district; in preventing unauthorized persons occupying the crown lands; in ascertaining that the squatters do not interfere with each other’s lands; in enforcing compliance with the squatting regulations; and in making periodical returns to the government at Sydney. The terms on which the land is let to squatters are stated at pages 427 and 431. This respectable and enterprising class of settlers now occupy many of the finest districts in Australia, and possess considerable wealth.

The Quantity of Land in Cultivation, showing Crops and Produce (exclusive of Gardens and Orchards), in New South Wales, including the District of Port Phillip, from the year 1837 to 1848 inclusive.

Year.	CROPS.									
	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Potatoes.	Tobacco.	Sown Grasses, Oats, and Barley for Hay.	Total Number of Acres in Crop.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
1837	59,975	18,381	2,551	3,893	493	80	1,165	533	5,054	92,125
1838	48,060	25,043	2,922	3,767	429	39	1,788	925	9,939	92,912
1839	48,401	22,026	3,490	6,793	483	46	1,115	424	12,534	95,312
1840	74,133	24,966	5,144	5,453	609	115	2,594	381	12,721	126,116
1841	58,605	25,004	5,423	5,892	495	47	4,027	380	15,257	115,130
1842	65,188	27,324	5,320	4,467	486	99	5,174	224	18,592	126,874
1843	78,083	29,061	5,727	4,537	514	42	5,872	655	21,162	145,653
1844	81,903	20,798	7,236	4,336	359	43	6,783	871	21,766	144,095
1845	87,894	25,372	10,455	6,109	330	36	5,101	483	27,551	163,331
1846	88,910	31,773	9,215	9,390	177	82	5,537	228	37,221	182,533
1847	81,044	27,240	7,178	10,201	310	83	5,550	67	33,111	164,784
1848	87,219	20,375	8,789	13,572	167	14	5,774	201	27,558	163,669

Year.	PRODUCE.								
	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Potatoes.	Tobacco.	Hay.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Cwts.	Tons.
1837	692,620	632,155	51,447	17,119	6,753	695	2,102	2,034	5,627
1838	469,140	556,268	32,103	13,416	4,878	353	3,496	4,952	6,960
1839	805,140	525,507	66,033	27,788	7,008	283	2,601	2,509	25,923
1840	1,116,814	777,947	105,389	66,020	8,863	3,338	11,050	4,300	21,329
1841	832,776	503,803	90,172	62,704	6,507	1,072	11,141	2,642	17,175
1842	854,432	590,134	88,767	84,321	4,451	1,201	12,561	2,014	18,622
1843	1,000,225	719,358	95,658	92,268	5,145	410	16,392	6,098	27,774
1844	1,312,652	575,913	132,612	70,620	4,475	511	22,748	6,382	31,848
1845	1,211,099	499,122	175,407	88,193	4,101	775	19,906	3,985	28,614
1846	1,421,750	870,400	193,835	216,783	2,250	1,929	18,329	2,087	42,754
1847	1,027,802	725,704	87,636	221,731	1,200	798	14,240	725	33,111
1848	1,528,874	262,340	145,219	116,643	2,386	158	14,954	3,059	37,795

Note.—From 1837 to 1841 the Crops and Produce of Land beyond the Boundaries of Location are not included.

CULTIVATION AND SQUATTERS IN NEW SOUTH WALES, 1848. 527

The following estimated quantity of land in cultivation in New South Wales, exclusive of gardens and orchards, on 31st December, 1839, will afford a comparison with the returns for the year 1848:—

Articles.	Under Crop.	Produce.	
	Acres.	Bushels.	Tons.
Wheat	48,401	805,140	—
Maize	22,026	525,507	—
Barley	3,490	66,033	—
Oats	6,793	27,788	—
Rye	483	7,008	—
Millet	46	283	—
Potatoes	1,115	—	2,601½
Tobacco	424	—	125½
Sown Grasses (Hay)	12,534	—	25,923

In 1839–40, the squatting stations contained 6,666 males and 621 female Europeans, who had among them 7,088 horses, 371,699 horned cattle, and 1,334,593 sheep, and the stations were thus distributed:—

District.	Persons occupying Stations.	Estimated Extent of Stations.		Acres in Cultivation.
		Miles.	Acres.	
Port Macquarie	21	137	87,760	561
New England .	53	560	358,400	333
Liverpool Plains	111	1,157	740,480	344
Bligh	53	5,696	3,655,440	201
Wellington . .	77	1,265	809,600	571
Lachlan	95	4,193	2,683,520	2,334
Murrumbidgee.	134	3,137	2,007,680	1,720½
Maneroo	150	1,585	1,014,880	1,978

Quantity of Land in Cultivation in New South Wales in 1848, in Acres.

Counties. (Sydney District.)	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Pota- toes.	Tobacco	Sown Grasses.	Wheat, &c., for Hay.	Total number of Acres in Crop.
Argyle	2,406	166	474	58	1	1	177	—	77	1,567	4,927
Bathurst	2,966	134	384	—	—	—	132	—	—	1,070	4,656
Bligh	215	49	4	8	—	—	—	—	—	127	403
Brisbane	328	283	12	—	—	13	11	—	5	130	732
Camden	7,350	1,879	477	171	18	8	510	4	476	1,238	12,071
Cook	3,620	2,732	246	158	3	—	169	3	—	577	7,508
Cumberland	10,310	5,327	877	1,143	250	14	153	1	376	15,859	34,311
Durham	7,392	4,663	360	6	—	16	29	58	561	352	18,437
Georgiana	1,537	13	125	46	9	—	123	—	—	239	2,086
Gloucester	2,517	1,311	73	—	—	6	16	—	100	38	4,061
Hunter	1,079	1,429	5	13	—	—	2	—	5	22	2,555
King	1,028	119	182	12	—	—	28	—	—	229	1,598
Macquarie	261	906	19	7	—	—	7	—	—	—	1,200
Murray	1,769	234	307	157	1	—	106	—	—	1,058	3,632
Northumberland . .	9,344	5,207	299	64	1	—	15	72	130	684	15,816
Phillip	425	103	19	—	4	—	—	6	60	105	722
Roxburgh	1,600	60	250	—	10	—	—	150	—	500	2,570
St. Vincent	1,894	731	85	15	—	—	—	690	—	274	3,689
Stanley	—	35	—	—	—	—	—	7	—	—	42
Wellington	307	83	16	6	—	—	13	9	—	259	693
Westmoreland . . .	1,111	150	81	36	11	4	194	—	—	200	1,787
Total in Counties	57,453	25,564	4,295	1,900	308	77	2,595	1,000	1,739	24,528	118,525
Commissioner's Dis- tricts, beyond the Limits of Location.											
Bligh	305	—	—	—	—	—	—	—	—	—	305
Clarence River . .	—	298	6	—	—	—	27	—	—	—	331
Darling Downs . .	30	120	4	6	—	—	10	—	—	10	180
Gwyder	—	—	—	—	—	—	—	—	—	—	—
Lachlan	1,297	34	25	25	2	—	11	1	—	591	2,046
Liverpool Plains . .	—	—	—	—	—	—	—	—	—	—	—
Lower Darling . . .	—	—	—	—	—	—	—	—	—	—	—
McLeay River . . .	87	314	16	2	—	—	9	—	—	12	440
Manaroo	1,258	104	70	50	—	—	113	—	—	374	1,969
Moreton Bay	22	36	—	—	—	—	—	—	—	—	58
Murrumbidgee . . .	2,000	300	200	—	—	—	—	—	—	450	2,950
New England	830	230	120	90	—	5	40	—	—	85	1,500
Wellington	83	3	2	—	—	—	7	—	6	93	194
Total in Commis- sioners' Districts	5,912	1,439	443	173	2	5	217	1	6	1,615	9,973

Note.—There are no returns for Gwydir, Liverpool Plains, or the Lower Darling.

528 AGRICULTURAL PRODUCE OF NEW SOUTH WALES, IN 1848.

Produce in New South Wales in 1848, and Area in Square Miles of each County.

Counties. (Sydney District.)	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.	Pota- toes.	Tobacco	Sown Grass Hay.	Wheat, &c., for Hay.	Area in Square Miles.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	tons.	cwts.	tons.	tons.	
Argyle	20,297	3,389	5,441	702	6	35	368	—	66	682	1,951
Bathurst	49,488	3,777	6,490	—	—	—	454	—	—	1,590	1,860
Bligh	3,120	58	16	10	—	—	—	—	—	104	1,683
Brisbane	4,038	7,105	80	—	—	—	28	—	15	—	2,344
Camden	11,077	37,055	7,864	2,301	171	20	526	80	754	113	2,188
Cook	34,509	80,498	2,405	1,789	60	—	248	23	—	698	1,652
Cumberland	57,430	113,786	4,682	2,397	68	103	556	9	386	402	1,445
Durham	75,654	126,889	3,202	—	—	57	50	605	878	4,256	2,187
Georgiana	23,493	202	1,707	448	179	—	373	—	—	127	1,924
Gloucester	34,268	32,641	1,497	—	—	170	25	—	105	225	2,930
Hunter	7,350	45,105	100	262	—	—	6	—	3	12	2,056
King	9,682	2,284	2,078	198	—	—	38	—	—	14	1,781
Macquarie	3,437	30,595	650	30	—	—	17	—	—	215	2,000
Murray	23,196	4,904	3,935	2,606	—	—	185	—	—	626	2,248
Northumberland	83,199	152,589	4,624	338	102	285	195	3	773	729	2,342
Phillip	5,040	2,850	60	—	50	—	11	—	50	44	1,618
Roxburgh	25,000	1,500	4,000	—	300	—	60	—	—	1,000	1,519
St. Vincent	30,241	21,685	944	274	—	—	2,200	—	—	270	2,667
Stanley	—	1,010	—	—	—	—	9	—	—	—	—
Wellington	4,738	2,440	80	40	—	—	38	—	14	177	1,656
Westmoreland	16,510	2,788	8,146	691	167	33	532	—	—	178	1,592
Total in Counties	594,767	673,780	50,731	12,136	1,103	703	6,219	720	3,044	11,472	39,586
Commissioners' Dis- tricts beyond the Limits of Location.											
Bligh	7,265	—	—	—	—	—	—	—	—	—	—
Clarence River	400	10,139	—	—	—	—	138	—	—	—	—
Darling Downs	400	4,800	—	—	—	—	12	—	—	8	—
Gwydir	—	—	—	—	—	—	—	—	—	463	—
Lachlan	14,838	517	998	310	17	—	7	5	—	26	—
Liverpool Plains	—	—	—	—	—	—	—	—	—	—	—
Lower Darling	—	—	—	—	—	—	—	—	—	—	—
M'Leay River	1,575	10,245	352	—	—	—	13	—	—	—	—
Manaroo	12,550	3,220	360	400	—	—	169	—	—	2,561	—
Moreton Bay	440	6,500	—	—	—	—	—	—	—	—	—
Murrumbidgee	24,000	7,500	3,000	—	—	—	—	—	—	562	—
New England	20,750	5,750	2,850	1,500	—	75	420	—	—	90	—
Wellington	1,097	60	30	—	—	—	7	—	4	51	—
Total in Commis- sioners' Districts	83,305	48,924	7,790	2,210	17	75	766	5	4	3,761	—

Note.—There are no returns for Liverpool Plains, or the Lower Darling.

The information contained in these returns is not supposed to be accurate, and must be viewed merely as an approximation to truth. It, however, conveys some idea of the relative extent of cultivation in each county and commissioners' district. The commissioners' districts are those occupied by squatters, to whom cultivation, except for their own supply, is prohibited. The area of all the above-named counties is stated to be, in square miles, 39,586, equal to 25,374,400 acres, of which it will be seen, that no more than 118,525 acres are under cultivation.

The "Commissioners' Districts," or the squatting stations, are held for pastoral purposes; the number of squatters, and the

area held by each, in 1849, throughout the territory of New South Wales (including the Sydney and Port Phillip Districts), was—

Persons holding licences—Sydney, 1,019; Port Phillip, 666 = 1,685. Number of licenses held—Sydney, 1,520; Port Phillip, 827 = 2,347. Acres of land occupied—Sydney, 43,896,232; Port Phillip, 29,464,240 = 73,360,472; or in square miles, Sydney, 68,000; Port Phillip, 46,000 = 114,600 square miles (the area of England is about 60,000 square miles). Average quantity of land held by each individual in Sydney, 67 square miles; in Port Phillip, 69; in the whole colony, 68. Two squatters hold more than 800,000 acres each; two ditto, 600,000 each; one ditto, 450,000; two ditto, 400,000; four ditto, 350,000; three ditto, 300,000; fourteen ditto, 250,000; fourteen ditto, 200,000; thirty ditto, 150,000; seventy-three ditto, 100,000; and two hundred and ninety-eight squatters hold more than 50,000 acres each.

According to a return prepared at the office of the colonial secretary of New South Wales, dated Sydney, 1st May, 1849, the following is a statement of the number of horses, horned cattle, pigs, and sheep, in each county and district in New South Wales, on 1st January, 1849:—

Counties or Districts.	Horses.	Horned Cattle.	Pigs.	Sheep.
Sydney District settled				
Argyle	3,652	22,831	1,285	260,708
Bathurst	3,614	18,339	1,021	266,369
Bligh	1,015	6,551	63	119,352
Brisbane	1,795	10,153	949	132,319
Camden	5,490	33,953	6,156	38,657
Cook	2,112	8,929	4,283	13,104
Cumberland	13,294	29,710	13,728	11,265
Durham	7,014	36,977	8,085	122,588
Georgiana	2,928	24,517	936	198,325
Gloucester	1,180	21,176	2,662	3,593
Hunter	1,416	6,776	1,735	11,239
King	1,319	16,200	708	106,986
Macquarie	872	14,544	698	14,300
Murray	4,340	28,288	1,339	328,972
Northumberland	5,827	34,563	10,653	21,806
Phillip	1,033	6,030	163	89,800
Roxburgh	2,420	18,250	630	188,900
St. Vincent	2,329	20,724	3,118	62,504
Stanley	446	3,947	145	23,829
Wellington	681	11,548	256	77,693
Westmoreland	2,040	13,277	924	46,994
Total	64,817	387,283	59,537	2,139,243
Commissioners' District, beyond the settled District.				
Bligh	1,313	52,940		193,221
Clarence River	1,405	48,847	867	116,767
Darling Downs	1,200	40,600	60	553,000
Gwyder	2,060	118,097	50	109,347
Lachlan	4,386	130,594	791	355,600
Liverpool Plains	3,946	130,081		341,465
Lower Darling	480	21,062	25	39,621
McLeay River	884	17,128	706	250
Maneroo	5,446	106,530	603	353,252
Moreton Bay	1,127	19,412	145	290,962
Murrumbidgee	4,586	132,301	1,200	704,165
New England	3,582	79,820	1,000	822,603
Wellington	1,683	69,385	232	277,025
Wide Bay	51	36		20,787
Burnett	372	6,409		204,734
Maranoa	62	5,639		8,500
Total	32,583	978,881	5,679	4,391,299
Total in Sydney Dis.	97,400	1,366,164	65,216	6,530,542
Port Phillip District, within settled District				
Bourke	2,000	30,500	2,550	137,600
Grant	627	8,056	535	267,300
Normanby	888	15,698	247	179,975
Belfast	65	208	59	81
Alberton	612	16,638	368	26,007
Total	4,192	71,100	3,759	610,963
Commissioners' Districts, beyond the settled District.				
Gipps' Land	1,070	37,985	500	193,961
Murray	3,483	84,942		521,997
Portland Bay	3,825	122,065		1,869,130
Western Port	3,233	54,158	1,100	1,196,698
Wimmera	692	16,438	300	737,528
Total	12,303	315,588	1,900	4,519,314
Total P. Phillip Dis.	16,495	386,688	5,659	5,130,277
General Total	113,895	1,752,852	70,875	11,660,819

It will be observed in the foregoing table that the number of sheep in the squatting districts is twice the number that are in the settled districts or counties. So also with regard to horses and horned cattle. The Murrumbidgee and the Darling Downs districts appear to be the favourite sheep pastures.

The progressive increase of live stock in New South Wales is thus shewn:—

Years.	Horses.	Horned Cattle.	Sheep.	Swine.
1788	7	7	29	No returns
1810	1,114	11,276	34,550	
1820	4,014	68,149	119,777	
1825	6,142	134,519	337,622	
1828	12,479	262,868	536,391	
1848	113,895	1,752,852	11,660,819	70,875

Such a rapid augmentation in the number of domesticated animals is unexampled in the history of any country, and would have been yet more remarkable, but for the extensive slaughtering of horned cattle and sheep to obtain tallow. What the amount may be at the next decimal period, it is impossible to say; the extensive regions to the northward recently found available for pasturage, will give an additional stimulus to the production of animal food and wool.

Live stock is becoming a staple export of New South Wales; horses are being largely purchased by the East India Company as remounts for their cavalry and horse artillery; and when steam navigation is established between India and Australia, this will probably prove a very lucrative traffic, as the horses of the southern colonies are well suited to withstand the trying climate of India. The following shews the trade in live stock for the last few years:—

Live Stock Imported.

Year.	Horses.	Horned Cattle.	Sheep.	Sheep and Hogs.
1837	92	97	55,208	307
1838	185	74	9,822	192
1839	652	135	17,567	359
1840	1,008	244	19,958	252
1841	875	156	530	50 Hogs
1842	113	89	638	65 Ditto
1843	31	28	609	4 Ditto
1844	52	21	307	—
1845	693	48	811	2
1846	655	29	1,228	—
1847	591	22	2,285	—
1848	255	26	1,363	—

Note.—The Sheep have principally been imported from Van Diemen's Land to the District of Port Phillip. The Horses have chiefly come from South America.

530 IMPORT AND EXPORT OF ANIMAL FOOD, NEW SOUTH WALES.

Live Stock Exported from N. S. Wales and P. Phillip.

Year.	Horses.	Asses and Mules.	Horned Cattle.	Sheep.	Hogs.	Value.
						£.
1843	248	2	1,852	77,116	—	41,915
1844	489	3	3,329	53,318	—	40,394
1845	1,159	—	3,972	33,651	6	53,438
1846	1,021	—	6,052	37,848	4	52,942
1847	466	—	8,034	71,440	—	57,355
1848	1,182	—	16,904	895,211	—	85,184

The colonists have now turned their attention to the curing of animal food, which will, doubtless, soon form a valuable item in their staple products. I used, while in

China, some of the concentrated soup prepared in New South Wales, and found it excellent. Samples of the salted meats sent to England have been pronounced equal to the beef provided by the Cork contractors for the navy; the climate is sufficiently cold to admit, during the season, of perfect curing, and it is to be hoped that her Majesty's government will allow her Majesty's ships on the East India station to be provisioned from Australia.

The following table shows the quantity and value of salt meat exported from, and the value of salt meat imported into, the colony in the under-mentioned years:—

Year.	Beef, Pork, and Mutton.	Mutton and Bacon Hams.	Tongues.	Value as entered in Returns of Exports.	Value as entered in Returns of Imports.
	Quantity.	Quantity.	Quantity.		
1843	2,867 casks 856½ tons	—	224 lbs.	£13,924	£19,286
1844	4,292 casks 294¾ tons	20,615	110 cwt. 150 in No.	18,730	3,355
1845	1,142 casks 425½ tons 345 packages 4,400 lbs. of preserved meats	94 cwt. 11,422 in No.	63 casks 2,450 in No.	12,163	5,200
1846	721 casks 1,126 tons 12 packages of preserved meats	39 cwt. 300 in No.	12 casks 300 in No.	15,664	7,197
1847	4,335 casks 866 tons 224 packages of preserved meats	224 cwt.	127	24,278	3,917
1848	2,308 casks 616 tons 90 casks of preserved meats	145 cwt.	228	19,477	3,229

The extensive herds of cattle will naturally cause a large increase in the hide and leather trade; the imports and exports of hides, and of manufactured and unmanufactured leather, is thus shown, from 1843 to 1848:—

Year.	Value Imported.	Value Exported.
1843	£36,185	£10,305
1844	19,844	22,285
1845	14,124	40,866
1846	15,230	28,999
1847	21,283	39,001
1848	24,358	25,939

The consumption of meat in Australia is very great: it is eaten three times a day; two hardworking bushmen will consume forty pounds in a week without difficulty; on farms beef is generally used, at pastoral stations, mutton; or they are alternated; one week four or five sheep are killed, next week a bullock. Both beef and mutton

yield to the palate a richer flavour than the generality of meat in England. Poultry is reared in considerable quantities for the markets of Sydney; and in the neighbourhood of the principal towns, Mr. Alexander Harris says he has seen "a whole flock of turkeys almost keeping themselves on the wild grasshoppers and such vegetable matters as they could pick up." Geese, ducks, and barn-door fowl multiply with astonishing rapidity. Sydney has a population of about 50,000 inhabitants, and the following is a statement of the live stock slaughtered in the city during 1848—viz., horned cattle, 30,613; sheep, 95,824; and pigs, 8,457.

Estimating the cattle at 830 lbs. each, the sheep at 70, and the pigs at 100, the quantity of meat would be 127,282,000 lbs., equal to six pounds three quarters per day for each mouth. There are, however, large exports of meat.

But it is not only in the article of animal food that New South Wales is now independent; the colony grows very nearly sufficient corn and vegetables for its annual wants. It will be seen by the following, that the value of vegetable food imported, has been diminished from more than a

quarter of a million sterling to less than fifty thousand pounds; and, by the subsequent table, that the colony is now exporting grain and flour. What a contrast this presents to the statements of famine and impending destruction which mark the early history of the colony:—

Articles.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
IMPORTS:—											
Wheat . . bushels	79328	171207	290843	239224	163224	395374	265704	109355	237717	224720	143235
Maize "	6040	30862	19185	12773	1120	583	17	—	536	—	—
Barley, Oats, and } Peas . . bushels }	58927	64093	63363	41610	37798	61361	35194	46399	46454	37469	49163
Flour and Bread lbs.	2478712	3579076	7108663	14929503	7247016	6941760	(4370240 & 250 casks of Biscuit)	3327632	5367936	5335680	3131744
Rice "	728346	1414747	6849896	3603076	2260046	1678208	260288	450040	1283968	1044288	932582
Potatoes . . . tons	1167	1189	1723	480	1401	547	1085	430	2663	1227	1617
Value of Imports . £	64313	285110	217063	201632	113070	112387	65442	39855	63764	52740	41489
EXPORTS:—											
Wheat . . bushels	—	—	—	—	—	273	825	1362	6252	8820	485
Maize "	—	—	—	—	—	4687	26184	5334	1867	62262	27058
Barley, Oats, and } Peas . . bushels }	—	—	—	—	—	1870	1798	292	545	4216	1300
Flour and Bread lbs.	—	—	—	—	—	3146192	2028344	2837632	3491744	1786400	650832
Potatoes	—	—	—	—	—	47	60	50	3	84	5
Value of Exports . £	—	—	—	—	—	13486	12232	13931	12258	16944	6639

WOOL.—The origin, progress, and the production of this valuable commodity deserve especial notice, from the material share it has had in the growing prosperity of Australian commerce, and moreover for its beneficial influence on the manufactures of the mother country. There can scarcely be a doubt, that the extensive growth of wool in Australia, and the reduction of price in German and Spanish wools, have had a most important effect on the woollen manufactures of England, and enabled her to maintain a competition with foreign countries. The manufacture of wool is the oldest known branch of trade in England; it existed during the period when the Romans were encamped among the Britons; and although the trade was greatly fostered by Edward III., there are notices on the statute book 100 years prior to that period, relative to "broad cloths two yards within the lists." For several centuries, it was a favourite policy of English monarchs and statesmen to encourage the wool trade; and to such an extent was this feeling carried, that it was deemed politic even to suppress the manufacture in Ireland. At the end of the seventeenth century, the value of the wool shorn in England was estimated at £2,000,000. The number of sheep and lambs in the United Kingdom is now estimated at about 40,000,000, and the annual production of wool at about 120,000,000 lbs. This, however, is a very vague estimate, which there are no agricul-

tural statistics in Britain to verify or disprove. It was, however, admitted, in the evidence before the House of Lords, in 1828, that a great deterioration had taken place, during the previous thirty years, in the fineness of English wools; the efforts of agriculturists having been directed to the weight of the carcase and of the wool—the lean Herefordshire sheep yielding 1½ lbs. of fine wool; the fat Norfolk sheep yielding 3 lbs. of coarse wool. Hence it became necessary to import largely Spanish and Saxony wools, in order to maintain the character of our cloths.

In 1829, the quantity of foreign wools imported into the United Kingdom was 21,118,976 lbs.; of which 14,110,006 lbs. came from Germany; 3,751,714 lbs. from Spain; and 1,838,642 lbs., or about *one-twelfth part* from all the Australian colonies. In 1834, Germany sent us 22,634,615 lbs.; Spain, 2,343,915; Russia, 3,107,951; United States, 2,048,309; Italy, 2,550,819; Tripoli and Barbary, 1,977,816; Turkey and Greece, 1,474,522; South America, 1,099,052; and our Australian colonies, 3,558,091 lbs. The total importations for the year were 45,647,870; Australia did not therefore then contribute *one-tenth part* of the foreign wool required. In 1848, the total quantity of wool imported into the United Kingdom was 69,343,477 lbs.; of this Germany furnished 14,428,723; Spain only 106,638; Russia, 2,349,009; Italy, 736,137; Turkey, 690,300; Denmark,

1,381,356, South America, 7,384,931; British India, 5,997,435; Cape of Good Hope, 3,497,250; and Australia, 30,034,567 lbs., in the following proportions:—New South Wales and Port Phillip, 22,091,481 lbs.; Van Diemen's Island, 4,955,968; South Australia, 2,762,672; Western Australia, 129,295; and New Zealand, 95,151 lbs.; our colonies in the Southern Pacific therefore contributed nearly *one-half* of the whole wool imported in the year 1848; while Germany, on which the main reliance of our manufactures was placed, only sent about 300,000 lbs. more than it had done twenty years ago. The proportions of colonial to foreign wool imported for twenty years between 1826 and 1846, at intervals of five years, is thus shewn; the two figures represent so many million lbs. weight; by colonial wool is understood all wool from possessions of the British crown:—

Annual Averages of Five Years.	Foreign Wool.	Colonial Wool.	Total Importation.
1826—30	25	2	27
1831—35	34	4	38
1836—40	44	10	54
1841—45	36	22	58
1846	34	30	64
1848	40	29	69

In the preceding table, is added the year 1848, as a further comparison of the ratio of colonial and foreign wool importations: 1850 would be still better in behalf of our colonies; and let it be remembered that, in 1826, the proportion of colonial to foreign wool was only the 250th part of the annual imports.

The following table, prepared by the statistical department of the Board of Trade, in March, 1846, shews the importations of colonial wool compared with foreign wool, year by year, from 1818 to 1844; it will be seen that while the quantity of foreign wool has not been doubled in quantity, that of colonial wool has risen from nothing to 22,600,000 lbs., or more than the foreign importations in any of the six years ending 1824. It may also be noted that the admission of colonial wool, duty free, in 1825, had a powerful influence in stimulating production in the colonies; in one year (1826) the importation increased nearly fourfold; for seventeen years there was an annually increased production in our maritime possessions; and so much was this augmenting supply required, that for eight-and-twenty years the prices of English wools were maintained.

Importations of Foreign and Colonial Wool into the United Kingdom from 1818 to 1844, and prices of English Wools.

Years.	Duty.	Foreign Wool.	Colonial Wool.	Total.	Price of Southdown.	Price of Kent Long.
		lbs.	lbs.	lbs.	per lb.	per lb.
1818	$\frac{3}{4}$ d. per lb.	24,720,139	—	—	2s. 6d.	2s. 0d.
1819	6d. per lb.	16,094,999	—	—	1 7	1 3
1820	"	9,653,366	122,239	9,775,605	1 5	1 4
1821	"	16,416,806	205,761	16,622,567	1 3	1 1
1822	"	18,859,265	198,815	19,058,080	1 3	0 11
1823	"	18,863,886	502,839	19,366,725	1 3 $\frac{1}{2}$	1 0
1824	Dec. 1824:— 1d. per lb. of 1s. value $\frac{1}{2}$ d. per lb. under 1s. val.	22 147,540	416,945	22,564,485	1 2	1 1
1825	Colonial free	43,465,282	351,684	43,816,966	1 4	1 4
1826	"	14,747,103	1,242,009	15,989,112	0 10	0 11
1827	"	28,552,742	562,599	29,115,341	0 9	0 10 $\frac{1}{2}$
1828	"	28,628,121	1,607,938	30,236,059	0 8	1 0
1829	"	19,639,629	1,877,020	21,516,649	0 6	0 9
1830	"	30,303,173	2,002,141	32,305,314	0 10	0 10 $\frac{1}{2}$
1831	"	29,110,073	2,541,956	31,652,029	1 1	0 10 $\frac{1}{2}$
1832	"	25,681,298	2,461,191	28,142,489	1 0	1 0 $\frac{1}{2}$
1833	"	34,461,527	3,614,886	38,076,413	1 5	0 10 $\frac{1}{2}$
1834	"	42,684,932	3,770,300	46,455,232	1 7	1 7 $\frac{1}{2}$
1835	"	37,472,032	4,702,500	42,174,532	1 6	1 6
1836	"	57,814,771	6,425,206	64,239,977	1 8	1 8 $\frac{1}{2}$
1837	"	38,945,575	9,434,133	48,379,708	1 3	1 3
1838	"	42,430,102	10,164,253	52,594,355	1 4	1 5
1839	"	44,504,811	12,875,112	57,379,923	1 4	1 5 $\frac{1}{2}$
1840	"	36,498,168	12,938,116	49,436,284	1 3	1 2 $\frac{1}{2}$
1841	"	39,672,153	16,498,821	56,170,974	1 0	0 11
1842	"	27,394,920	18,486,719	45,881,639	0 11 $\frac{1}{2}$	0 10
1843	"	26,633,913	21,151,148	47,785,061	0 11 $\frac{1}{2}$	0 11
1844	from June 6th, free	42,473,228	22,606,296	65,079,524	1 2	1 2
'845	"	"	"	76,828,152	1 4	1 3

Until the Australian colonists began to send fine wools to England, the Germans and Spaniards had almost a monopoly of the supply, and their prices at one time ranged from 10s. to 12s. per lb.; now they are not one-fifth of that sum. The prices of Australian fine wools are about 1s. to 1s. 6d. per lb.

The facts connected with the origin of Australian wool-growing will be interesting to many. In 1793 the late John M'Arthur, then captain in the corps serving in New South Wales, assumed that the grasses and climate of Australia were adapted for the rearing of Merino sheep, and in 1797 he obtained from captain Kent, R.N., three rams and five ewes, of pure breed, which were sent to the Cape of Good Hope by the Dutch government, but not being valued by the settlers, captain Kent brought them to New South Wales. Mr. M'Arthur immediately began to cross his coarse-fleeced sheep with the Merino, and in ten years his flock, which consisted originally of seventy common Bengal sheep, was increased to 4,000, although the wethers were slaughtered as they became fit for food. In 1803 Mr. M'Arthur returned to England, exhibited samples of his wool to a committee of manufacturers who happened to be then in London, which samples were much approved. On the 26th of July, 1803, he addressed a letter to Lord Hobart, stating at length the progress made in producing wool of a "softness superior to many of the wools of Spain, and certainly equal in every valuable property to the very best procured from thence."

On the 4th May, 1804, captain M'Arthur addressed a memorial on the subject to the committee of the Privy Council for trade; and on the 6th July, 1804, appeared before that committee, and stated his plans for rendering England independent of foreign countries for a supply of the best wools. The Privy Council encouraged the views of the enterprising colonist, who stated that he was ready to take the risk and expense on himself. All he required was an allotment of 10,000 acres of grazing land, and liberty to select thirty convicts as shepherds. The Privy Council finally, after hearing the evidence of governor Hunter, and other conclusive testimony, recommended that a reasonable grant of pasture land should be made to captain M'Arthur, instead of to a company, as proposed, and that the governor be instructed to feed the convicts on mutton, instead of salt provisions; for the

lords of the committee were "led to imagine and entertain hopes that wool of a fine quality may be produced in this colony; and that as wool of such fine quality is much wanted and desired by the manufacturers of cloth in England, it being mostly drawn, at this time, from a country influenced, if not dependent, on France, their lordships entertain no doubt that it is well deserving the attention of his Majesty's government, to encourage the produce of fine wool in the colony of New South Wales." King George the Third, who, at that time, paid great attention to agricultural and pastoral pursuits, entered into the patriotic views entertained by his Majesty's council, and captain M'Arthur obtained, from the Merino flock of the king, several ewes and rams, with which he returned, in 1806, on board a vessel appropriately named the *Argo*, to the land so fortunate in being adopted by him for the scene of his meritorious labours.

Such was the commencement of the rapidly-increasing flocks of fine-woolled sheep in Australasia, which now (1850), including all the southern colonies, number at least 12,000,000, which contribute annually about 25,000,000 lbs. to the manufacturers of the United Kingdom, and which, within the next five years, will most probably not furnish less than 50,000,000 lbs. yearly, whereby our labouring population will be enabled to exchange flimsy cotton garments for warm woollen clothing, better suited to our climate.

That this is not an exaggeration will be admitted, when we consider that New South Wales possessed, in 1843—sheep, 5,000,000; 1848 (January), 10,054,000. An increase of cent. per cent. in four years—*five million in four years*. The annual augmentation has been about 1,250,000, notwithstanding the prodigious number slaughtered for their tallow, as will be presently shown. Mr. Arthur Hodgson states the number killed, in 1847, at 181,000; and that 70,000 were exported to New Zealand and the islands of the Pacific. It is reasonable to infer, that the annual increase on eleven to twelve million sheep in the next five years, will be not less than 2,500,000 per annum, which will raise the number of sheep to nearly 25,000,000 in the year 1855: these flocks, at only two pounds of wool per fleece, would yield 50,000,000 lbs. weight of wool.

The following statement gives the quantity of wool annually shipped from New

South Wales, from 1807 to 1836, a period of five-and-twenty years:—

Year.	lbs.	Year.	lbs.	Year.	lbs.
1807	245	1821	175,433	1829	1,005,333
1808	562	1822	172,880	1830	899,750
1811	167	1823	198,240	1831	1,401,284
1815	32,971	1824	275,560	1832	1,515,156
1816	73,171	1825	411,600	1833	1,734,203
1817	13,616	1826	552,960	1834	2,246,933
1818	86,525	1827	407,116	1835	3,893,927
1819	74,284	1828	834,343	1836	3,693,241
1820	99,415				

This shows an augmentation from 245 to 3,693,241 lbs. In the annexed table the return is continued, and the value is added, proving, in twelve years, a quintupling in quantity, viz.—from 4,448,796 to 22,969,711 lbs., and a quadrupling in value:—

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	lbs.			lbs.	
1837	4,448,796	£332,166	1843	12,704,899	£685,647
1838	5,749,376	405,977	1844	13,542,173	645,344
1839	7,213,584	442,504	1845	17,364,734	1,009,242
1840	8,610,775	566,112	1846	16,479,520	1,019,985
1841	8,390,540	517,537	1847	22,379,722	1,272,118
1842	9,428,036	595,175	1848	22,969,711	1,240,144

TALLOW promises to form nearly as valuable an article of export as wool; it is a branch of traffic which originated in the recent commercial depression of the colonists in New South Wales. In 1840–1 there was considerable speculation in the purchase of land by the colonists; and the money thus laid out was transmitted to England, for the conveyance of emigrants to the colony. Had the land been bought in the United Kingdom by capitalists here, the colonists would have been benefited; but the reverse was the case. Between November, 1840, and November, 1841, the local government withdrew about £260,000 from the colonial banks; and, in 1841, upwards of £300,000 was paid for immigration. The colony could have borne this abstraction of capital, if it had been gradual; but the suddenness of the withdrawal of so large a sum, necessarily brought on a monetary crisis, which the want of foresight on the part of the governor and authorities at Sydney, and their incapability of supplying any remedy, rendered most distressing in its consequences.

In 1841–2 the colonial banks, partly in self-defence, in the midst of a full swing of pastoral activity and commercial enterprise, suddenly reduced the amount of discounts; and, to use a familiar expression, brought the whole of the colonists “on their haunches.”

In 1841, the advances of the banks, chiefly on bills and promissory notes, was £2,582,203; in 1843 this sum was reduced to £1,583,137, and a large part of this consisted of “locks-up,”—or bills renewed from time to time. The importations from England had been excessive; quantities of articles, sufficient for two or three years’ consumption, were imported at once, and must be paid for; the price of wool had been falling for several years in England; added to this, the government raised the selling price of land, and, nearly simultaneously, transportation ceased—and with it, the annual supply of convict labour, and the large governmental expenditure furnished by the British exchequer. It was not surprising, therefore, that cash, or a representative medium of exchange, became exceedingly scarce in New South Wales—and, as a necessary consequence, the price of every commodity fell far below its intrinsic value; men were compelled to make any sacrifice, to try and meet their engagements—there was almost universal bankruptcy—and the power of the monied classes to ruin a nation or community, when that community is dependent for the daily interchange of all its wants, on a very limited amount of gold or silver coin, became fearfully apparent. Sheep, the staple of the colony, fell from ten shillings to sixpence or one shilling each; and, even at that price, were only received in barter, or in payment of debts; everything else, but the few sovereigns in the colony, fell in like proportion. So great was the distress, that most of the mercantile houses and persons reputed of great wealth, were declared insolvent: their numbers stood thus in—

	1842.	1843.	1844.	Total.
Sydney . .	600	535	221	1,356
Melbourne .	113	124	45	282
Total . .	713	659	266	1,638

According to an intelligent colonist, Mr. Westgarth, the collective debts of these 1,638 insolvent estates amounted to no less than three-and-a-half million sterling, and the assets were merely nominal; for, as he truly observes, “many extensive merchants and large proprietors beheld the ample substance they were once possessed of, gradually disappear with the reduced value of their land, live stock, and other property.” Mr. Braim mentions, that at the period of depression, he heard a rich man in Sydney state in a most lugubrious tone, that he had been obliged

to take, in payment of a debt, 10,000 sheep, at Moreton Bay, at 1s. each. So little did he think of his bargain, that he put them in flocks of from ten to fifteen hundred, and removed the ewes, to prevent the increase, and consequent addition to his expenses of management. Many of the large flock owners determined to slaughter their fat sheep and horned cattle, and boil them down, so as to obtain the largest quantity of tallow from the carcase, which, as meat, was valueless. The example was set by a stock owner named O'Brien, who rightly conceived, that the mere fat of the animals would be more valuable in England, than the entire animals were in New South Wales. The mode of "boiling down" consists in throwing the entire carcase, except the hind legs, of the sheep or bullock, into a large boiler or vat, and by the process of steaming, the whole of the fatty parts are extracted and received into casks, ready for shipment to England. The hind legs, which contain but little fat, are sold, and the price of good mutton is thus reduced to one penny, or even a halfpenny per pound.

The extent to which the slaughtering system has been carried, is shown in the following statement of the quantity of tallow and lard produced in New South Wales in 1848:—

Number of Boiling-down Establishments, Cattle, Sheep, &c., slaughtered, and Tallow and Lard produced.

Number of	Sydney, within the settled Dis.	Sydney, without settled Dis.	Port Phillip District.	Total.
Establishments	41	14	7	62
Sheep	141,573	24,128	120,691	286,392
Horned Cattle	27,682	5,415	5,545	38,642
Tallow, cwts. .	49,311	11,530	27,725	88,567
Hogs	23	33	2	58
Lard, cwts. .	875	990	200	2,065

The system has now been in operation for six years; in 1843, there was produced 5,680 cwts. of tallow, value £9,639; in 1848, 98,213, value £140,579.

Year.	Quantity.	Value.
	Cwt.	
1843	5,680	£9,639
1844	56,609	83,511
1845	71,995	102,746
1846	20,357	28,107
1847	69,690	108,186
1848	98,213	140,579

Mr. Gideon S. Lang, in a work on "Land and Labour in Australia," furnishes the following estimate of the wool and tallow

which will be produced when one-third of the area of the district of Port Philip is occupied, and the stock of the middle district of the colony has increased in the same proportion—sheep and cattle in the same ratio to each other as at present:—

—	Sydney.	Port Phillip.
Sheep.	8,631,250	5,000,000
Cattle	2,125,300	500,000
Cast five years old	2,151,310	1,100,000
Consumption, export, & dead	774,907	562,200
Melted	1,377,373	537,800
Tallow (20 lb. per sheep, 186 lbs. per hd. of cattle)	33,493	8,900
Wool, 2½ lbs. per sheep . .	23,735,937	13,750,000

Value of the above produce in Britain—wool, 37,485,937lbs., at 1s. 3d. = £2,342,871; tallow, 42,393 tons, at £40 per ton = £1,695,720. Total—£4,038,591.

At no distant day, Australia will render us independent of Russia, for the supply of tallow, as it has already done of Germany or Spain, for the supply of wool.

WINE AND BRANDY. — The number of acres planted with the vine, and the produce thereof, on the 31st of March, 1849, was as follows:—

Counties.	Acres.	Wine.	Brandy.
SYDNEY DISTRICT:—		Gallons.	Gallons.
Argyle	7	50	—
Bathurst	4	450	—
Bligh	3¼	74	—
Brisbane	79	4,467	4
Camden	60	21,350	260
Cook	24	330	—
Cumberland	259	17,413	352
Durham	162	29,808	75
Georgiana	—	—	—
Gloucester	82	4,045	72
Hunter	19½	957	—
King	6	25	25
Macquarie	22	4,300	280
Murray	6½	30	—
Northumberland	112	11,001	95
Phillip	1½	180	—
Roxburgh	25	2,560	—
St. Vincent	—	—	—
Stanley	2½	—	—
Wellington	—	—	—
Westmoreland	0¾	—	—
Beyond settled Dis.	11	260	—
Total in 1848	887	97,300	1,163
„ in 1844	508	33,915	751
PORT PHILLIP DIS.:—			
Bourke	57	—	—
Grant	48	6,000	100
Normanby	3	306	—
Total	108	6,306	100
Gen. Total in 1848	995	103,606	1,263

Australia will become an extensive wine country; the grape thrives in every locality, although in some soils better than in others; and the wine made has not the earthy flavour peculiar to some of the Cape of Good Hope wines. The manufacture is yet in its infancy.

The Australian wines bear a strong resemblance to good Sauterne, Barsae, Hock, Claret, &c. Lieutenant-colonel M'Arthur recently visited several of the wine districts in Germany and France, selected experienced vine cultivators, and manufacturers of wine and brandy, whom he has sent out to the colony with their families; and he will thus have the honour of conferring on the colony a benefit nearly equal to that which his respected father conferred by the introduction of fine-woolled sheep. Sir T. L. Mitchell, the surveyor-general of New South Wales, in 1847 visited Spain, and obtained useful information on the mode of preparing raisins, that he might be still more extensively useful to the land of his adoption. The olive and mulberry are peculiarly fitted to the soil and climate of New South Wales; and olive oil and silk may, ere long, be added to its list of products. Indigo grows wild in several districts in New England, where the soil and seasons are well adapted for the growth of coffee, tea, cocoa, and sugar. Cotton and tobacco ought also to become very valuable articles of export. Moreton Bay, and the regions to the northward, to which Dr. Lang has drawn public attention, will doubtless, in time, possess great plantations of cotton, tobacco, rice, and other articles which we now receive from the United States. Australia can procure from India, from China, and from the islands of the Eastern Archipelago, any required quantity of free labour, skilled in the cultivation of these great staples of European consumption, at a price of fourpence or sixpence per day; and I confidently look forward to the period when

the intercourse between England and Australia will constitute one of the largest and most lucrative portions of the traffic of the British empire.

The extension of pasturage is furnishing an increasing supply of dairy produce, which will not only render the colonists independent of foreign supplies, but also yield a surplus for export. The decreasing imports and increasing exports of butter and cheese are thus stated, from 1843 to 1848:—

Year.	Imported.		Exported.	
	Quantity.	Value.	Quantity.	Value.
	lbs.		lbs.	
1843	248,170	£9,497	81,173	£3,488
1844	60,704	1,184	188,174	3,717
1845	22,216	579	172,368	4,313
1846	45,456	1,062	100,287	3,665
1847	10,164	413	253,880	5,977
1848	15,456	417	216,130	4,116

The cheese and butter made in New South Wales are excellent; "Mrs. Rankin's cheese," prepared at Bathurst, would sell well in England; other ladies are now turning their attention to a matter peculiarly within their province, and the markets of India and China will take off their hands whatever they can prepare.

Timber has not hitherto formed a large article of export; in the earlier condition of the colony, cedar and blue gum were its staple products; but other and more valuable items have usurped their place. The country around Moreton Bay must, however, contain abundance of good furniture wood, which is always in demand in England. The following shows the imports and exports of timber for several years into New South Wales. In the book on Western Australia the quality of the Australian woods will be stated:—

Imports for the under-mentioned years.

Year	Deals.	Other Timber.					Sandal wood.	Total Value.
		Sawn, &c.	Wrought.	Shingles.	Laths.	Paling		
	Quantity.	Quantity.	Quantity.	Quantity.	No.	No.	Tons.	
1843	12,327	{ 212,890 ft. 509 loads }	82 packages	3,000	115,000	172,000	107	£10,156
1844	2,951	{ 101,228 ft. 108 loads }	54 do.	{ 414,000 3 loads }	—	500,000	90	4,195
1845	{ 10,457 256 loads }	{ 604,524 ft. 541 loads }	5 prs. sashes	2,118,685	254,500	128,630	415	10,541
1846	31,256	1,255,569 ft.	—	{ 1,485,000 15½ loads }	461,750	392,570	44	10,278
1847	22,418	2,483,431 ft.	—	2,633,600	1,424,800	675,742	351	14,951
1848	17,952	2,652,970 ft.	—	4,199,000	1,320,900	767,915	50	16,347

Exports for the under-mentioned years.

Year.	Quantity of Cedar.	Quantity of Blue Gum, Pine, and other Timber.	No. of Treenails and Spokes.	Value.
1828	847,805 superficial feet . .	215,541 superficial feet . .	65,837	£11,428
1829	940,486 . . ditto . . .	608,647 . . ditto . . .	181,817	16,293
1830	368,830 . . ditto . . .	179,403 . . ditto . . .	23,959	5,218
1831	580,393 . . ditto . . .	416,857 . . ditto . . .	24,316	8,401
1832	418,930 . . ditto . . .	233,653 . . ditto . . .	186,831	6,132
1833	1,086,437 . . ditto . . .	147,170 . . ditto . . .	328,503	13,153
1834	899,492 . . ditto . . .	30,065 . . ditto . . .	212,467	7,941
1835	907,921 . . ditto . . .	145,628 . . ditto . . .	178,969	10,489
1836	1,409,467 . . ditto . . .	3,778 . . ditto . . .	35,094	14,385
1837	116,828 . . ditto . . .	18,828 . . ditto . . .	62,989	14,463
1838	699,066 . . ditto . . .	9,000 . . ditto . . .	73,450	6,382
1839	729,001 . . ditto . . .	823 deals } 15 logs }	40,588	8,815
1840	1,250,786 . . ditto . . .	151,500 superficial feet . .	4,350	20,971
1841	513,139 . . ditto . . .	1,000 . . ditto . . .	26,890	7,004
1842	522,882 . . ditto . . .	27,404 . . ditto . . .	55,644	5,800
1843	944,121 . . ditto . . .	10,020 . . ditto } 30 logs }	155,294	9,813
1844	1,222,533 . . ditto . . .	99,500 superficial feet }	105,428	8,825
	214 pieces	33 logs		
	24 logs			
1845	781,415 superficial feet . .	73,300 feet . . } 241 logs, &c. }	105,908	8,074
1846	956,515 . . ditto . . .	390,006 feet	113,972	7,851
1847	953,995 . . ditto . . .	46,850 feet	165,648	7,333
1848	863,507 . . ditto . . .	22,150 feet	76,201	5,675
		20 pieces		
		7,600 shingles and palings }		

Note.—1844, Also a large quantity of Timber, the measurement of which was not stated when entered at Custom House.

The manufactories in 1848 were:—

Manufactories, &c.	Sydney.	Port Phillip.	Total.
Grinding and dressing grain:—			
Steam	57	8	65
Water	56	7	43
Wind	25	1	26
Horse	39	2	38
Total	157	18	175
Distilleries	2	—	2
Rectifying and compounding	2	—	2
Breweries	12	9	21
Sugar refining	2	—	2
Soap	15	3	18
Tobacco and snuff	4	—	4
Woollen cloth	6	—	6
Hat	4	—	4
Rope	4	—	4
Tanneries, &c.	33	7	40
Salt	2	—	2
Starch	1	—	1
Blacking	2	—	2
Patent oatmeal and groats .	1	—	1
Salting establishments . .	1	1	2
Meat preserving ditto . . .	3	—	3
Potteries	7	—	7
Glass works	—	1	1
Smelting ditto, copper . . .	1	—	1
Iron and brass founderies .	11	2	13
Patent slip for ships . . .	1	—	1
Steam vessels	17	—	17
Fire engines	3	—	3

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At the woollen manufactories there were made, in 1847, of cloth, 18,484 yards; of tweeds, 156,604 yards; and blankets, 424. The *tweeds*, an excellent fabric, command a ready sale, and are now becoming an article of export; the manufacture will, doubtless, be extended. The materials for making soap abound; the thirteen soap manufactories made, in 1848, 24,180 cwt. The tobacco manufactured is about 1,000 cwt. annually, and as the climate is well suited for its culture, the preparation of the “weed” will, doubtless, be improved. One sugar-refining establishment, in 1848, turned out 26,000 cwt. of refined sugar. The preceding list of manufactories shows how greatly the colonists desire to render themselves independent of supplies which increase their imports, and for which they have not yet adequate exports. In the article of blacking, alone, they say the value of imports has been reduced by £10,000 annually; it will, however, be a sounder policy, to increase the number and quantity of their exports for the English market, by which they will be enabled to procure manufactured articles at a far cheaper rate than they could be prepared in the colony.

The minerals will ultimately be a source

of wealth. The coal mines in the colony, their produce in 1848, and the value of it, was :—

Mines.	Coal.	Value.
	Tons.	
Aust. Agric. Co. Newcastle	34,381	£11,737
Ditto at Lake Macquarie .	1,700	510
Ditto at Burwood . . .	1,738	608
Ditto at Maitland . . .	7,023	1,265
Ditto at Morpeth . . .	205	35
Ditto at Moreton Bay . .	400	120
Total	45,447	14,275

All but the first-named mine are in the early stages of their working; some only commenced in 1848.

There are five copper mines commencing work, viz.—at Bathurst, Yass, and Molong. The Fitzroy iron mine at Berrima has had its machinery put up and shaft sunk in 1848. In the language of the official report to government, “the ore of this mine has the peculiar property of turning into pure steel when smelted.” If gold, as is expected, be found in large quantities, another valuable article of export will be provided; for the precious metal will henceforth become a merchantable commodity, and rank among exchangeable products. Gold is a raw product, and answers the same purpose as wool, tallow, oil, timber, copper, iron, or any other article, in enabling its finders to purchase such merchandize as they may require. If, therefore, gold exists in Australia, to an extent at least equal to that found in California, there can be no reason for preventing the colonists gathering it. Every pound of gold raised in the mines or valleys of the Australian Alps, will enable the colonist to purchase a pound’s worth of English manufactures. The currency of the United Kingdom is very far below the amount required for a remunerating interchange of labour and goods. In England, the whole gold, silver, copper, and bank-note currency, in *actual circulation*, is not £3 sterling per head; in Scotland, it is nearly £5; in Ireland, it does not amount to much more than *ten shillings* for each inhabitant: whereas a full currency ought, at the very least, be equal to £10 sterling per head, otherwise the nation is exposed to the vicissitudes arising from the alternate states of a deficiency or a plethora of money: panic succeeds prosperity in a vicious circle, rendering commerce a gambling game, and enterprise a hazardous speculation. The

production of large quantities of gold in Australia would, therefore, be a great gain to the colonists, and a boon of incalculable value to the people of England.

The important subject of emigration will be fully discussed in the last volume of this work, and a fair examination be made of the relative advantages and prospects of the several colonies for different classes of emigrants; it will consequently be only desirable to give here the annexed statement of the average prices of food, and the general wages of labour in New South Wales during the year 1848, by which intending emigrants of the poorer class can judge the cost of living, and the means available for its support. It is calculated that New South Wales could with ease afford remunerative employment annually to 10,000 additional able-bodied immigrant labourers for the next ten years; and there is no country better adapted for a man whose power of manual labour is his sole property, and who possesses the indispensable requisites of honesty, sobriety, and persevering industry :—

Average Prices of Produce during 1848 at Sydney :
—Wheaten flour, 10s. to 12s. per 100 lbs.; wheat, 4s. to 4s. 6d. per bushel imperial; wheaten bread, 2½d. to 3d. loaf of 2 lbs.; maize, 1s. 5d. to 1s. 10d. per bushel; barley, 2s. 6d. to 3s. 6d.; oats or rye, 3s. 6d. to 4s. 6d.; potatoes, 3s. to 6s. per cwt.; hay, £4 to £6 per ton; straw, £2 5s. to £2 10s.; horned cattled, £2 5s. to £2 10s. per head; horses, £4 to £20 each; sheep, 5s. to 7s. 6d. per head; goats, 5s. to 15s. each; swine, 7s. 6d. to £2; milk, 6d. per quart; butter, fresh, 6d. to 1s. per lb.; salt, colonial, 5d. to 10d.; cheese, colonial, 4d.; fresh beef, 1½d. to 2d.; mutton, 2d.; fresh pork, 4d. to 5d.; rice, 2½d.; coffee, 8d.; tea, 1s. 4d.; moist sugar, 2½d.; salt, 1d.; wine (Cape), 4s. per gallon; brandy, 16s.; rum, imported, 10s.; beer, colonial, 1s. 4d.; tobacco, imported, 3s. 2d. per lb.; tobacco, colonial, 1s. 3d.

Wages of Labour.—Domestic, male, £18 to £40 per annum; female, £12 to £25; predial, £18 to £25; trades, £35 to £40.

Weights and Measures, as in England.

Fruits and Vegetables.—The fruits and culinary vegetables of Australia are numerous and of excellent quality. In a small garden at Paramatta I had the apple, pear, peach, nectarine, apricot, loquat, quince, cherry, plum, melon, pine-apple, figs, citron, orange, grape, mulberry, walnut, gooseberry, strawberry, raspberry, and currant, all in full perfection. So abundant is the peach, that, in many places, I have seen the farmers feeding their pigs with the windfalls of their teeming orchards. My lamented friend, the late Allen Cunningham, informed me, that during his explorations in the interior, he and his men were often refreshed

and nourished by finding peach-trees scattered about in the forest, where they had grown from stones planted by bush-rangers, or from having been dropped by birds. In grateful recognition of the benefits thus received, as a weary and fainting traveller, Cunningham always carried about him a bag of peach stones, which he planted on every occasion, in suitable places. The small settlers make a cider and a brandy from their peach fruit.

Among other fruit-trees, besides those above-named, are the almond, which flourishes remarkably well; banana, in the more northern positions. The fig produces two crops in the year, without any further trouble than that of planting: the fruit is of the finest flavour, abundant in quantity, presses well, and will probably become a valuable article of export. Grapes, of every variety, are very plentiful, and are now being dried as raisins, as well as extensively manufactured into wine, brandy, and vinegar. The Chinese fruit, termed loquats, are as fine as any I ate in China. While on this subject, I venture to recommend to the colonists the introduction of the lichee, and other excellent fruit, which I obtained at Foochoofoo and at Shanghai. Our consuls at those stations could readily procure the young fruit-trees. Melons, water and sweet, grow almost wild in New South Wales. The farmers scatter a few seeds among their corn, and they thrive so luxuriantly as to be scarcely an article of sale, except in the towns. They sometimes attain a size of twenty-four pounds weight. The lemon flourishes as standards or as hedges. The orange arrives at a degree of perfection greater than I have witnessed in any other country excepting Malta. A richer sight can hardly be conceived than Mr. Suttor's orangerie near Paramatta. If I remember rightly, I walked through one grove of large orange trees, in full bearing, which was more than a quarter of a mile in length; and I believe the respected proprietor found it a very profitable article of production. Mr. Mobbs also realized a handsome fortune from his orangerie. The mulberry thrives in every part of the colony; and its growth may be augmented to an almost indefinable extent for the feeding of silkworms; but I would recommend the obtainment of a peculiar species of mulberry which grows near Nankin, and in the regions bordering the great river Yangt-tse-kiang, which is found by the experienced Chinese

to yield the finest silk. The neighbourhood of Port Stephens and Port Macquarie ought to be among the most productive silk countries in the world; and to render them so skilled, Chinese might be induced to settle in the country, bringing with them the mulberry and best silkworms. The olive affords great promise: wherever the vine yields well, there the olive generally thrives. I noticed how this valuable commercial shrub flourished at Ithaca, Cephalonia, and along the coast of the Morea, where the soil and climate were very similar to those of New South Wales. The walnut, filbert, and chestnut are in perfection, especially the filbert, which are of a size and flavour unsurpassed. All the culinary vegetables of Europe are of large size and excellent flavour. Potatoes, carrots, parsnips, turnips, onions, peas, beans, cabbages, spinach, artichoke, asparagus, celery, cucumbers, radishes, seakale, yams, rhubarb, &c., would be highly prized in Covent-garden market. The various beautiful flowers which adorn the gardens of England are extensively cultivated in New South Wales, where they attain a magnitude and beauty which add to their natural charms. The saying, that the fruits of Australia are without flavour, and the flowers devoid of odour, refers to those of the country, and not to the introductions from Europe. The annual exhibitions of the "Australian Floral and Horticultural Society," at Sydney, fairly rival those of Chiswick or Regent's-park; and the botanical gardens at Sydney, the governor's gardens at Paramatta, those of Mr. M'Arthur, and other colonists, are equal, in extent and variety, to many of the best gardens in the United Kingdom. The Englishman carries his love of fruits and flowers to whatever country he makes his home; and, in Australia, he has full scope for the gratification of his refined taste and habits.

MARITIME COMMERCE.—The trade of New South Wales was for many years in a very unsatisfactory state; the imports were in value about five times that of the exports, and the balance of payments in exchange was defrayed by bills on her majesty's treasury in London to meet the convict expenditure in the colony. There were then few exportable articles, and it was feared that no staple products available for transmission to England could be created. By extraordinary energy these difficulties have been surmounted; there is now no convict expenditure from the home exchequer, and an

examination of the annexed complete returns last twenty years will shew, that they are of the value of imports and exports for the now balanced the one against the other.

Imports into New South Wales and Port Phillip, 1828 to 1848.

Year.	From Great Britain.	From British Colonies.	From South Sea Islands.	From Fisheries.	From United States.	From other Foreign States.	Total.
1828	£399,892	£125,862	—	£44,246	—	—	£570,000
1829	423,463	135,486	—	42,055	—	—	601,004
1830	268,935	60,356	—	91,189	—	—	420,480
1831	241,989	68,804	—	179,359	—	—	490,152
1832	409,344	47,895	—	147,381	—	—	604,620
1833	434,220	61,662	—	218,090	—	—	713,972
1834	669,663	124,570	—	197,757	—	—	991,990
1835	707,183	144,824	£1,420	177,365	£13,902	£70,161	1,114,805
1836	794,422	220,254	1,972	135,730	22,739	62,289	1,237,406
1837	807,264	300,313	1,764	80,441	9,777	97,932	1,297,491
1838	1,102,127	309,918	5,548	71,506	8,066	82,112	1,579,277
1839	1,251,969	576,537	3,863	186,212	23,093	194,697	2,236,371
1840	2,200,305	431,146	1,348	104,895	24,164	252,331	3,014,189
1841	1,837,369	332,296	24,361	97,809	35,282	200,871	2,527,988
1842	854,774	298,201	10,020	64,999	20,117	206,948	1,455,059
1843	1,034,942	227,029	22,387	42,579	12,041	211,566	1,550,544
1844	643,419	153,923	10,624	32,507	17,187	73,600	931,260
1845	777,112	237,759	40,048	43,503	7,416	128,016	1,233,854
1846	1,119,301	262,943	21,799	56,461	4,459	165,559	1,630,522
1847	1,347,241	388,724	6,919	41,557	1,550	196,032	1,982,023
1848	1,084,054	263,787	2,642	73,715	2,065	130,287	1,556,550
1849							

Exports from New South Wales and Port Phillip, 1828 to 1848.

Year.	To Great Britain.	To British Colonies.	To South Sea Islands.	To Fisheries.	To United States.	To other Foreign States.	Total.
1828	£81,008	£4,845	—	£6,708	—	—	£90,050
1829	146,283	12,692	—	15,821	—	—	161,716
1830	120,559	15,597	—	—	—	—	141,461
1831	211,138	60,354	—	16,949	—	—	324,168
1832	252,106	63,934	—	19,545	—	—	384,344
1833	269,508	67,344	—	—	—	—	394,801
1834	400,738	128,211	—	28,729	—	—	587,640
1835	496,345	83,108	£2,696	39,882	£18,594	£3,011	682,193
1836	513,976	136,596	9,628	30,180	13,697	2,625	748,624
1837	518,951	157,975	485	54,434	10,617	17,592	760,854
1838	583,154	160,640	7,137	33,988	11,324	6,525	802,768
1839	597,100	289,857	1,347	34,729	18,568	7,175	948,776
1840	792,494	520,210	6,621	27,864	27,885	24,618	1,399,692
1841	706,336	238,948	13,144	18,417	4,837	41,715	1,023,397
1842	685,705	298,023	3,005	22,862	17,101	40,715	1,067,411
1843	825,885	285,756	17,934	18,827	—	23,918	1,172,320
1844	854,903	236,352	14,106	11,623	—	11,131	1,128,115
1845	1,254,881	276,788	17,656	1,593	—	5,068	1,555,986
1846	1,130,179	328,922	13,441	590	—	8,407	1,481,539
1847	1,503,091	335,137	14,231	—	—	17,587	1,870,046
1848	1,483,224	335,887	6,944	—	—	4,313	1,830,368
1849							

The relative proportion of the shipping thus shown by the tonnage entering inwards engaged in the trade of Sydney, New South from Great Britain, the British colonies, and Wales, and of Melbourne, Port Phillip, is elsewhere, in 1848 :—

—	From Great Britain.		From British Colonies.				From South Sea Islands.		From Fisheries.		From United States.		From other Foreign States.		Total.	
			New Zealand.		Elsewhere.											
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Sydney . . .	71	34,309	106	23,877	233	45,173	23	2,695	63	17,473	1	406	30	7,753	527	131,686
Port Phillip	48	23,295	10	956	406	42,349	—	—	—	—	—	—	5	1,018	469	67,618
Total .	119	57,604	116	24,883	639	87,522	23	2,695	63	17,473	1	406	35	8,771	996	199,304

The number and tonnage of vessels which entered inwards in the colony of New South Wales (including the district of Port Phillip), from the year 1837 to 1848, inclusive, was—

Year.	From Great Britain.		From British Colonies.				From South Sea Islands.		From Fisheries.		From United States.		From other Foreign States.		Total.	
			New Zealand.		Elsewhere.											
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1837	56	21,816	36	5,480	233	33,751	5	581	48	13,004	5	1,220	17	4,262	400	80,114
1838	102	41,848	38	4,291	241	34,469	6	616	31	7,928	1	274	9	2,351	428	91,777
1839	137	58,123	51	8,368	290	45,928	7	836	36	9,321	4	1,177	38	11,721	563	135,474
1840	190	80,806	68	13,123	347	53,625	6	750	27	8,087	8	2,520	63	20,047	709	178,958
1841	251	106,332	48	7,601	322	43,922	3	358	23	6,163	13	4,754	54	14,648	714	183,778
1842	137	55,144	81	14,085	282	42,365	19	2,902	20	5,806	7	2,762	82	20,857	628	143,921
1843	87	35,914	43	6,229	325	43,934	25	4,194	30	7,967	5	1,116	43	11,510	558	110,864
1844	78	34,765	54	7,189	226	31,195	13	1,831	27	7,888	3	1,005	16	3,666	417	87,539
1845	80	29,954	62	6,237	364	47,532	24	2,612	37	11,900	1	243	29	6,874	597	105,352
1846	84	36,761	65	10,865	475	57,485	27	3,005	79	24,375	1	370	36	8,606	767	141,467
1847	88	37,941	75	10,516	565	69,614	25	2,443	78	22,558	1	160	46	11,672	878	154,904
1848	119	57,604	116	24,833	639	87,522	23	2,695	63	17,473	1	406	35	8,771	996	199,304

DUTIES levied under the authority of Acts of Parliament—(1.) Upon all spirits made or distilled in the colony, 3s. 6d. per gallon; (2.) Upon all rum or whisky imported, 3s. 6d. per gallon; (3.) Upon all other spirits and liqueres whatsoever imported, 6s. per gallon; (4.) Wine imported, fifteen per cent. additional value; (5.) Tea, sugar, flour, meal, wheat, rice, and other grain and pulse imported, 5s. per cent. additional value; (6.) Tobacco unmanufactured, 1s. 6d. per lb.; (7.) Tobacco manufactured, 2s. 6d. per lb.; (8.) All other goods, wares, and merchandize, not being the produce or manufacture of the United Kingdom, imported into the colony, ten per cent. additional value. Wine imported for the use of military and naval officers on full pay, *free of duty*.

There are also wharfage rates levied at public and private sufferance wharfs, and on all descriptions of goods imported: for instance, at public wharfs, on beer, per hhd. 6d.; on wine or spirits, 1s. per leaguer; on sugar, 1s. 4d. per hhd.; on unenumerated goods, 2s. 4d. per ton. There is also a rate levied of one halfpenny per ton per diem on vessels unloading or refitting, beyond a certain number of days; for instance, thirty-five days are allowed free for a ship of 500 tons.

Custom House Charges.

Description.	Custom House Charges.		Light House Dues.
	Entry.	Clear.	
For the entry inwards or clearance outwards of ships or vessels (vessels under 50 tons registered in Sydney excepted); for any steam vessels in the coasting trade from one port to another of New South Wales.	1s. 3d.	1s. 3d.	0s 0½d.
For every other vessel so emptied above 50 and not exceed. 100 tons	2 6	2 6	2 0
For every other vessel so emptied above 100 tons	7 6	7 6	0 2
For every other ship or vessel . .	15 0	15 0	0 2

A Tonnage Duty is levied of 3d. per ton on all vessels above fifty tons entering any port in the colony, unless the same shall have been paid at any other port of the colony within the previous four months. Coasting vessels pay only once a-year.

Harbour Dues, varying from 5s. on vessels under fifty tons, to 30s. on vessels of 500 tons and upwards, are levied on entry of harbour, or on shifting anchorage, not for the purpose of leaving port. Coasting vessels from one port of the colony to another exempted.

The value of the trade in articles of British and British colonial produce and manufacture, is shewn in a return only complete for the last five years. It includes, as does the previous and subsequent statements, Port Phillip district:—

Imports.

Year.	United Kingdom.	British Dominions.	Foreign States.	Total.
1844	£629,510	£154,572	£147,178	£931,260
1845	786,514	156,491	290,849	1,233,854
1846	1,111,238	88,638	430,646	1,630,522
1847	1,269,183	95,118	617,722	1,982,023
1848	1,029,926	114,900	411,724	1,556,550

Exports.

Year.	New South Wales.	United Kingdom.	British Dominions.	Foreign States.	Total.
1844	£864,709	£119,197	£64,266	£79,943	£1,128,115
1845	1,269,062	100,901	110,160	75,863	1,555,986
1846	1,201,433	120,424	80,499	79,183	1,481,539
1847	1,649,031	136,385	15,865	68,765	1,870,046
1848	1,621,509	127,368	22,220	59,271	1,830,368

It appears from the foregoing that imports from the United Kingdom of British produce and manufacture in 1848 were, in value, upwards of £1,000,000 sterling, or more than £5 per head of the population. The imports into the United States of British goods do not amount to ten shillings per head.

The increase of the imports of New South Wales between 1835 and 1840 was very remarkable; a few items will shew the progress of the colony in five years:—

Agricultural implements, in 1835, *nil*; in 1840, £4,565; apparel and slops, £58,658 and £144,890; bacon and hams, 44,373 and 675,785 lbs.; beef and pork, 2,544 and 19,766 barrels; beer and ale, 421,697 and 1,292,701 gallons; books, £4,699 and £12,791; butter, 74,090 and 338,775 lbs.; cabinet and upholstery ware, £4,026 and £16,186; coffee, 183,803 and 469,457 lbs.; copper (sheet and old), 41,581 and 358,788 lbs.; cordage, 3,642 and 10,103 cwt.; corn and wheat, 101,283 and 224,021 bushels; other grain, 21,161 and 76,276 bushels; wheat and flour, 3,672 and 21,882 bushels; cotton manufactures, £61,196 and £142,150 (in 1839, £230,775); earthenware, £6,820 and £20,179; fruit, of all sorts, £2,597 and £16,356; glass manufactures, £36,822 and £63,425; haberdashery, £22,510 and 66,713; hardware and cutlery, £18,253 and £79,970; hats, £12,777 and £23,245; hops, 10,332 and 126,696 lbs.; unwrought iron, 2,758,560 and 8,593,618 lbs.; wrought iron, £20,235 and 67,943; lead and shot, 315,590 and 1,104,609 lbs.; leather manufactures, £7,216 and £32,593; linen manufactures, £29,454 and £66,955; machinery, *nil* and £8,493; medicines, £708 and £17,230; cocoa-nut oil, *nil* and 14,606 gallons; painters' colours, £7,223 and £15,545; pickles and sauces, £7,223 and £15,545; rice, 859,060 and 7,517,716 lbs.; saddlery, £5,314 and £22,417; salt, 76,278 and 154,322 bushels; silk manufactures, £21,927 and £44,590; soap, 399,754 and 2,656,780 lbs.; spirits of all sorts, 327,990 and 627,476 gallons; stationery, £11,755 and £36,744; raw sugar, 5,176,730 and 11,269,856 lbs.; refined sugar, 411,391 and 1,039,078 lbs.; tea, 1,311,357 and 1,189,100 lbs.; tobacco, £13,194 and £78,340; wine, of all sorts, 313,427 and 494,285 gallons; woollen manufactures, £33,348 and £111,979. Aggregate value of imports, £976,091 and £2,548,775; aggregate value of exports, £675,226 and £1,289,036. Sheep's wool, 3,908,177 and 9,541,474 lbs.; tallow, 12,026 and 48,874 lbs.; number of sheep and swine, 2,154 and 24,153; number of neat cattle, 225 and 3,365.

Although the aggregate value of the imports exceeded that of the exports, yet there was a large increase not only of the staple products of the colony, but also of many imported articles, which passed through New South Wales as a *depôt in transitu* to other surrounding countries. I do not know a similar rapid increase of commercial prosperity in any other country, and but for the injurious imperial legislation and orders from England, this wonderful prosperity would most probably have remained unchecked, and England would have participated in the welfare of its distant dependency.

The return of articles imported into the Sydney district alone (exclusive of Port Phillip) during the year 1847, gives the estimated value in the colony at £1,544,327, and for 1848 £1,182,874. An enumeration of some of the principal articles imported from Great Britain during the year 1848

will give a good idea of the importance of a colonial trade to England; how it enters into various branches of manufactures, and how the consumption of goods made at home fosters and promotes a taste, which must increase, and which materially tends to create a preference for English over foreign goods. During the year 1848, 117 *distinct articles* were imported into Sydney from Great Britain; I select from the list before me a few of the leading articles, shewing the quantities imported. Excepting sugar, 9,988 tons, and tea 2,108,916 lbs. (value £71,353 and £26,142,) nearly every other article was from the United Kingdom.

Quantity and Value of some of the Articles of British Produce imported into the Sydney District during the year 1848.—Alkali (soda), 3,325 cwt., £2,188; apparel and slops, 1,507 bales, £55,510; ammunition—gunpowder, 34,466 lbs., £1,295; shot, 964 cwt., £1,009; bags and sacks, 376 bales, £4,205; beer and ale, 475,433 gallons, £54,804; blacking, 331 casks, £892; blankets and counterpanes, 150 bales, £5,661; brushware, 141 packages, £2,312; canvas, 466 bales, £7,867; carpeting, 118, £2,648; carriages and carriage materials, 67 packages, £1,652; painters' colours, 4,001 kegs, £4,883; copper, 2,341 cwt., £10,058; cordage and rope, 3,835, £3,674; corks and bungs, 271 bales, £1,305; cottons, 1,696, £64,919; drugs and medicines, 1,369 cases, £9,594; earthenware and china, 1,090 crates, £10,284; salt fish, 833 barrels, £1,632; furniture, 928 packages, £3,258; glass and glassware, 3,685, £8,502; grindery, 86 casks, £1,566; haberdashery, 1,527 cases, £73,597; hardware and ironmongery, 7,800 packages, £65,029; hats, caps, and bonnets, 365 cases, £6,730; hops, 925 pockets, £3,703; horse hair, 56 casks, £1,248; hosiery and gloves, 262 cases, £11,829; musical instruments, 101 cases, £3,708; iron and steel, 2,451 tons, £22,533; jewellery, 32 cases, £2,529; lead, 165 tons, £3,022; unmanufactured leather, 32 cases, £1,230; boots and shoes, 624 trunks, £13,529; linens, 1,567 cases, £50,272; lucifer matches, 99 cases, £975; machinery, 99 packages, £1,484; malt, 3,511 casks, £2,245; millinery, 93 cases, £3,833; iron nails, 2,253 kegs, £3,188; copper nails, 652, £1,821; oil cloth, 20 cases, £257; oilman's stores, 9,644 packages, £28,927; perfumery, 100 cases, £1,291; tobacco pipes, 2,408 boxes, £2,454; pictures and paintings, 41 cases, £1,256; pitch, tar, and resin, 1,957 barrels, £878; plate and plated ware, 28 cases, £1,284; saddlery and harness, 197 cases, £6,368; salt, 3,715 tons, £9,403; ship chandlery, 68 packages, £666; shooks and staves, 13,404 bundles, £133; silks, 131 cases, £12,348; number of slates, 41,000, £170; spirits—brandy, 118,819 gallons, £28,316; rum, 223,706, £26,406; gin, 42,669, £8,954; whisky, 9,480, £2,425; liqueurs, 1,212, £403; starch and blue, 499 cases, £1,176; stationery and books, 1,891 cases, &c., £33,156; tin and tinware, 1,296 boxes, £2,456; tobacco, cigars, and snuff, 572,406 lbs., £10,968; toys and turnery, 243 cases, £3,315; turpentine and varnish, 2,406 gallons, £371; twine and thread, 98 packages, £1,542; umbrellas and parasols, 22 cases, £1,203; vinegar, 21,946 gallons, £1,368; watches and clocks, 81 cases, £415; wine, 302,741 gallons, £37,918; woollens, 1,508 bales, &c., £57,365; woolpacks and bagging, 471 bales, £8,350; zinc, 910 cwt., £228.

The principal exports for 1848, from Sydney alone, were—wool 12,445,048 lbs., value £683,628; woollen manufactures (Tweeds), 59 packages, value £1,468; tallow, 3,565 tons, £102,611; horses, 1,181, £14,137; horned cattle, 10,208, £16,457; sheep, 25,331, £8,737 (about 6s. 10d. per sheep); sperm oil, 1,186 tuns, £64,230; black whale oil, 196 tuns, £3,177; whalebone, 11 tons 2 cwt., £1,385; skins of neat cattle, 1,308 tons, £17,498; soap, 121 tons, £2,716; cedar, 863,307 feet, £5,133; leather, unmanufactured, 108 tons, £5,702; maize, 27,058 bushels, £3,063; butter and cheese, 81 tons 9 cwt., £2,836; tallow candles, 69,804 lbs., £1,117; coals and coke, 6,266 tons, £2,980; carts and waggons, 244, £2,010. Of the total exports nearly 1,000,000 sterling (£963,590) consist solely of the produce of the colony: out of £1,155,009, total exports, the amount sent to Great Britain was £901,869, to New Zealand £163,938, and to other British possessions £78,210.

There are other ports in the Sydney district which are now commencing a direct trade with England and other places. The

exports from the port of Newcastle in 1847 were valued at £14,112, and included 2,450 tons of coals, value £884, or 7s. 2d. per ton; 3,484 sheep, 379 horned cattle, 58 horses, 2,000 lbs. of flour, 102 bushels of barley, 2,748 lbs. of maize, ten and a half tons of hay, and other articles were all sent to New Zealand. To England were sent from this new port in the same year—wool 169,611 lbs., value £9,435; tallow, 30,428 lbs., value £600; The trade of Melbourne will be given when describing Port Phillip.

The ports of Australia, Van Diemen's Island, and New Zealand, are favourably situated for carrying on the whale fishery in the southern hemisphere. Since 1845 whalers have been exempted from port charges in Sydney harbour, and the following is a return of the ships and vessels engaged in the fisheries that have visited Port Jackson during the last five years; distinguishing those that are colonial, British, or foreign, with the tonnage of each description, and the estimated value of the cargoes disposed of by the last-mentioned class for payment for repairs, refitting, and refreshment:—

Year.	Colonial Vessels.		British Vessels.		Foreign Vessels.		Description and Value of Cargo disposed of by Foreign Ships.			
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Sperm Oil.	Black Oil.	Whalebone.	Value.
1844	13	3,052	3	1,219	12	3,617	Tuns. 122	Tuns. 152	Cwt. 33	£4,993
1845	15	3,444	7	2,685	15	5,345	37	122	147	4,269
1846	16	3,894	9	2,287	55	18,147	203	30	129	6,981
1847	23	5,345	4	1,137	43	13,866	368	192	673	15,804
1848	26	613	1	267	37	11,203	158	8 $\frac{3}{4}$	5	4,340

The whale and seal fisheries of New South Wales have of late years diminished; the whale is very migratory, and seems to have endeavoured to elude his persevering pursuers by taking refuge in the Northern Pacific,

where, for the last few years, the fish have been found in great numbers on the coasts of Japan and near Saghalien. The value of the New South Wales fisheries is thus shewn for eighteen years:—

Year.	Sperm Whale.	Black Whale.	Whalebone.		Seal Skins.	Value.
	Tuns.	Tuns.	Tons.	Cwt.	Quantity.	
1828	348	50	—	—	7,647 in number	—
1829	885	—	—	—	12,350 "	£94,101
1830	1,282	518	—	—	5,460 "	115,780
1831	1,914	1,004	—	—	4,972 "	—
1833	3,183	420	—	—	2,465 "	169,278
1836	1,700	1,178	—	—	386 "	126,085
1837	2,559	1,565	77	—	107 "	183,122
1838	1,891	3,055	174	—	3 cases . . .	197,644
1839	1,578	1,229	134	14	7 " . . .	172,315
1840	1,854	4,297	250	—	474 in number	224,144
1841	1,545	1,018	84	13	41 "	127,470
1842	957	1,171	60	5	162 "	77,012
1843	1,115	190	22	8	155 "	72,989
1844	810	526	15	18	3 bales . . .	57,493
1845	1,352	571	21	13	2 casks, 10 Skins	96,804
1846	1,064	344	17	9	—	70,126
1847	1,214	331	8	3 $\frac{3}{4}$	—	80,528
1848	1,186	196	11	2	4 cases . . .	68,969

The number of ships engaged in the whale fishery in 1848, in connection with New South Wales, was 64; viz., 37 foreign; 3 British; 24 colonial: and the produce—sperm oil, 1,274 tuns, value £67,005; black oil, 389 tuns, £9,180; whalebone, 306 tons, £1,472. Total value — £77,652. At Port Phillip there were four boats engaged, which collected 15½ tuns of oil, value £235; whalebone, 6 tons 6 cwt.

The increase of the shipping entering the ports of New South Wales has been very great since 1828:—

Year.	Number.	Tons.
1828	137	32,559
1829	158	37,342
1830	157	31,225
1831	155	34,000
1832	189	36,020
1833	210	50,144
1834	245	58,532
1835	260	63,019
1836	269	65,415
1837	400	80,114
1838	428	91,777
1839	560	135,474
1840	709	178,958
1841	714	183,778
1842	628	143,921
1843	558	110,864
1844	417	87,539
1845	597	105,352
1846	767	141,467
1847	878	154,904
1848	996	199,304

In twenty years the number of ships increased seven-fold, and the tonnage six-fold. Since 1848 the shipping and trade of the colony have been very largely augmented.

The number and tonnage of vessels built and registered in the colony have been:—

Year.	Vessels Built.		Vessels Registered.	
	Number.	Tons.	Number.	Tons.
1834	9	376	19	1,852
1835	7	303	21	2,267
1836	9	301	39	4,560
1837	17	760	36	3,602
1838	20	808	41	6,329
1839	12	773	79	10,862
1840	18	1,207	98	12,426
1841	35	2,074	110	11,250
1842	26	1,357	89	9,948
1843	47	1,433	92	7,022
1844	18	519	87	8,087
1845	18	1,042	98	9,376
1846	28	1,032	83	4,895
1847	36	2,284	104	9,428
1848	28	1,561	103	7,584

The numbers respectively built and registered during 1848 in the Sydney and Port Phillip districts, were—

District.	Ships Built.		Registered.		
	No.	Tons.	No.	Tons.	Men.
Sydney . . .	26	1,281	87	6,618	336
Port Phillip .	2	280	16	966	80
Total .	28	1,561	103	7,584	416

I have now recounted the rise and progress up to the present time, of the trade and staple products of New South Wales; that trade is again in a healthy state, and from the large quantity of shipping to which it gives employment, in voyages occupying nearly a year, out and home, a skilful and hardy race of seamen are trained, well adapted for service on any emergency necessary for the national defences.

CHAPTER V.

GOVERNMENT OF NEW SOUTH WALES—PROGRESSIVE GRANT OF FREE INSTITUTIONS —EXAMINATION OF PROPOSED NEW CONSTITUTION—AND LAWS IN FORCE IN THE COLONY.

THE government of New South Wales was founded by an order in council, dated 6th December, 1786. By that order, and by the king's warrant, dated 3rd April, 1787, for issuing letters patent, to appoint a vice-admiral, and a judge of the vice-admiralty court for the new settlement, its limits were declared to extend "from the Northern Cape, or extremity of the coast called Cape

York, in the latitude of 10°37' S., to the South Cape; the southern extremity of the coast, in the latitude of 43° 39' S., and inland to the westward, as far as 135° E. long., including all the islands adjacent in the Pacific Ocean within the latitudes aforesaid." Norfolk Island was included within the limits of the boundary marked out by the order in council. It was not then known that Van Diemen's

Land was an island; and it continued subject to New South Wales until an order in council, dated 14th June, 1825, declared Van Diemen's Land independent of New South Wales, by which Bass' Straits became the southern limit of the colony.

By the commission issued to captain Phillip, the first governor appointed by the crown in 1787, full power was given him to pardon all malefactors sentenced to death by the court of criminal jurisdiction, which consisted of a judge-advocate, (captain Collins), and *six* officers of the sea and land service, acting under a precept issued by the governor. No offender could suffer death unless five members of the court agreed in the award. The governor was fully empowered to make laws for the good government of the colony. The act 27 Geo. III., c. 2, only authorized his Majesty to establish a court of criminal jurisdiction; but, by an order in council, a civil court was formed, consisting of the judge-advocate, and two inhabitants appointed by the governor, who were to hear and determine, in a summary way, all pleas of lands, houses, debts, contracts, and all personal pleas whatsoever.* This civil court could examine witnesses on oath, issue executions under the hand of the judge-advocate, and grant probates of wills and administration of the personal estates of intestates dying within the colony. An appeal lay from this court to the governor, and from him to the Privy Council if the thing in demand exceeded the value of £500.

For several years, the administration of government and of justice was despotic and imperfect. Shortly after the foundation of the settlement, several convicts stated that the period of their sentence to transportation had been completed, but it was found impossible to ascertain if their statements were true, as the important documents concerning the crimes and sentences of the prisoners had never been sent from England. So little were even the formalities of jurisprudence preserved, that the judge, after hearing the evidence against a criminal, used to retire with the military jury to deliberate upon the verdict in an adjoining room. It was only on the suggestion of Mr. Bigge, when commissioner of inquiry, that judge-advocate Wylde charged the members of the court in the presence of the prisoner. The first governors paid little attention to the law court, whose chief, in return, was not very particular in registering the various

orders and proclamations issued, from time to time, by the governors, or very strenuous in requiring them to be obeyed. Governor Bligh not unfrequently took the administration of the criminal law into his own hands, and punished whom he chose.

Governor Macquarie, of whom Mr. Wentworth thus speaks—"never was there a more humane and upright man"—also caused "three freemen, two convicts, and two women" to be seized for trespassing on a particular spot: he ordered, without any hearing, both freemen and convicts to be flogged with twenty-five to thirty lashes each, and the women to be imprisoned for forty-eight hours. These and other proceedings led to an investigation of the state of the colony under the authority of a royal commission, and the exertions of Mr. Wentworth, a lawyer of much popularity at Sydney, and author of an interesting work on N.S. Wales and Van Diemen's Land in 1819, prepared the way for a change in the administration of the government and of justice.

On the 13th of October, 1823, his Majesty, under the authority of an act of parliament (4 Geo. IV. c. 96), issued letters patent constituting a supreme court with cognizance of all pleas, civil, criminal, or mixed, and jurisdiction in all cases whatsoever in New South Wales and its dependencies, after the manner of his Majesty's courts of King's Bench, Common Pleas, and Exchequer at Westminster.

In 1823-4, the first step in the progress of free institutions was made (under the provisions of the act 4 Geo. IV., c. 96), by appointing a council to aid the governor; this council was formed of the officer in command of the troops, the archdeacon, the colonial secretary, the treasurer, and attorney-general.

In 1823, an act of Parliament (the 9 Geo. IV., c. 83, s. 20) declared it to be inexpedient to call a Legislative Assembly for the colony, and in lieu of one, provided that it should be lawful for his Majesty under the sign manual to constitute and appoint a council of such persons resident in the colony not exceeding fifteen, nor less than ten, as his Majesty might be pleased to nominate and appoint.

Under the authority of this act of the Imperial Legislature, the governor, with the concurrence of at least two-thirds of the members, might make laws for the colony, if not repugnant to the act 9 Geo. IV. c. 83, or to the charter, or letters patent, or orders

* See Clarke on *Colonial Law*. London: 1834.

in council, or to the laws of England. The governor to have the initiative in the introduction of all laws to be submitted to discussion in the council, provided he gave eight clear days' notice in the public journals, or by public advertisement (should there be no journals), of the general objects of the act proposed to be brought under consideration, unless in case of emergency, when such notice might be dispensed with.

Any member of the council might request the governor to introduce a bill for the consideration of the council. If the governor declined, he was bound to lay his reasons in writing, together with a copy of the bill, before the council, and any member, disapproving of such refusal, might enter upon the minutes the grounds of his disapprobation. If a majority of the members dissented from any bill, and entered the grounds of their dissent on the minutes of council, the bill could not become law. Every bill passed by the council was to be transmitted within seven days to the supreme court, to be enrolled, and after fourteen days from the date of such enrolment, it came into operation. If the judges represented that such bill was repugnant to statutes or other public deeds before cited, it was again brought under the consideration of the council, and if again passed, proceeded into operation, until the pleasure of his Majesty were known, to whom were to be transmitted the opinions of the judges, &c. The votes and proceedings of the Legislative Council were to be officially published in the newspapers. The governor and council had the power of imposing taxes for local purposes. By 3 Geo. IV., c. 96, continued by 9 Geo. IV., c. 83, s. 26, the governor was authorized to impose, on importation into the colony, duties not exceeding 10s. a gallon on British or West India spirits, and 15s. on all other spirits: not exceeding 4s. per lb. on tobacco, nor 15s. per cent. upon goods, wares, &c., not being the growth, produce, or manufacture of the United Kingdom; and, by 9 Geo. IV., c. 83, s. 26, the governor was also empowered to levy a duty upon colonial spirits, not exceeding that levied on imported spirits.

In 1842, (30th July), under the act 5 & 6 Victoria, c. 76, a Legislative Council of thirty-six members was created, of whom one-third was nominated by the crown, and two-thirds elected by the colonists, on whom an elective franchise was conferred, namely, an estate of freehold in possession in lands

or tenements, situate within the district for which such franchise is to be exercised, of the clear value of £200 sterling at the least, above all charges and incumbrances in any way affecting the same, or a householder within such district, occupying a dwelling-house of the clear annual value of £20 sterling money at the least. No person was thus qualified to vote unless he had arrived at the full age of twenty-one years, a natural born or naturalized subject of the queen; and if he had been attainted or convicted of treason, felony, or infamous offence, within her Majesty's dominions, unless he had received a free pardon, or one conditional on not leaving the colony, or had undergone the sentence or punishment to which he had been adjudged for such offence. Voters to be qualified must have been in possession of estate, or occupancy of house, at least six calendar months before the date of writ for election, and have paid up all rates and taxes payable by him as owner, in respect of such estate or house, which shall have become payable during three calendar months next before election or registration. The qualification of elective members of council was fixed at a legal and equitable seisure of an estate of freehold, for his own use and benefit, in lands and tenements in New South Wales, of the yearly value of £100 sterling, or of the value of £2,000 sterling, above all charges and incumbrances affecting the same. Under this act, the legislature then in operation was authorized to make all necessary provisions for dividing the colony into convenient electoral districts; for issuing, executing, and returning the necessary writs for such elections; for determining the validity of disputed returns, and other such matters: but it was provided, that the district of Port Phillip should be formed by a straight line drawn from Cape Howe to the nearest source of the river Murray, and thence along the course of that river to the eastern boundary of the province of South Australia. This district of Port Phillip was to return at least five members; the town of Melbourne, in Port Phillip, one; and Sydney, New South Wales, two members. The Legislative Council, when constituted, had power given them to increase the number of the members of their body, and to alter the districts and electoral divisions, provided the proportion of one-third members of the council, to be nominated by her Majesty, be preserved. Not more than half the number of non-elective mem-

bers of the Legislative Council, appointed by the crown, were to hold any office of emolument under the crown in New South Wales. The non-elective members to hold their seats for five years from the date of appointment, or until the council be dissolved. Non-attendance for two successive sessions, bankruptcy, insolvency, being a public defaulter, conviction of treason or felony, becoming a subject or citizen of any foreign power or powers, or being *non compos mentis* (of unsound mind), would be causes for declaring a seat in the Legislative Council vacant. The governor and Legislative Council were, by this act, authorized to make laws for the peace, welfare, and good government of the colony, provided such enactments were not repugnant to the laws of England, and did not interfere in any manner with the sale or other appropriation of the lands belonging to the crown in the said colony, or with the revenues thence arising. The governor might propose laws to the council; or amend the bills passed by the council, when presented to him for her Majesty's assent; and the council might, in like manner, return any bill in which the governor shall have made any amendments, with a message, signifying those of the amendments to which they agreed, and those to which they disagreed; and thereupon the bill was to be taken and presented for her Majesty's assent, with the amendments so agreed to. The governor might, in her Majesty's name, give an assent to bills passed by the council, or he might withhold it, reserving such bill for the signification of her Majesty's pleasure thereon; and all bills affecting the salaries of the governor, superintendent of Port Phillip, or the judges, or bills altering or affecting the duties of customs upon any goods, wares, or merchandise, or altering the constitution of the Legislative Council, shall, in any case, be so reserved, except temporary bills, which may be assented to by the governor, by reason of some public and pressing emergency. All bills assented to by the governor, to be transmitted to one of her Majesty's secretaries of state; and the queen may, by her Majesty's order in council, within any time during two years after the receipt of the said bill, declare her disallowance of it. The taxes, duties, rates, and imposts levied in the colony, were declared to be appropriated to the public service within the colony, by ordinances to be enacted by the governor, with the advice and consent of the Legislative Council. pro-

vided the governor should have first recommended to the council to make provision for such public service, towards which such money is appropriated, and subject to the fixed annual payment of the sums mentioned in the following schedule:—

Governor	£5,000
Superintendent at Port Phillip	1,500
Chief Justice	2,000
Three Puisne Judges	4,500
Salaries of the Attorney and Solicitor-General, Crown Solicitors, and contingent and miscellaneous expenses of administration of justice throughout the colony	20,000
Colonial Secretary and his department	7,000
Colonial Treasurer and his department	5,000
Auditor-General and his department	3,000
Salary of Clerk, and miscellaneous expenses of Executive Council	600
Pensions	3,000
Public Worship	30,000

These sums might be varied, or altered, and any saving accruing thereby, might be appropriated to such purposes connected with the administration of the government of the colony as to his Majesty might seem fit.

By clause XLI. of this act, provision was made for the local government of different parts of the colony, by empowering the governor to issue letters patent under the great seal of the colony of New South Wales, to incorporate the inhabitants of every county within the colony, or of such parts of counties or other divisions as to him shall seem fit, to form districts for the purposes of this act; to constitute in each district of not less than 7,000 souls, an elective council of not more than nine members; if the district have 7,000 to 10,000 souls not more than twelve councillors, and so on in proportion to the number of souls, the maximum being twenty-one councillors to 20,000 souls. The district councillors to be persons qualified to be elected as members of the Legislative Council; and the district electors to be persons qualified to vote in the election of members of the Legislative Council in the district in which the election is made. If district councillors were not elected by the people, the governor might appoint them. No district councillor to continue in office more than three years, unless re-elected; or to hold any lucrative office under such district council, or to enter into any contract, or have pecuniary dealings with such district council, under certain penalties. The district council to be presided over by a warden, appointed and removable by her Majesty or by the governor; a competent district surveyor to be appointed, and to be removable by

council, subject to approval of governor; the said surveyor to superintend the construction of roads, public works, &c. The district councils to raise, assess, levy, and appropriate money in their respective districts for making roads, streets, bridges, constructing or repairing public buildings, establishing and supporting schools, defraying the expenses of, or connected with, the administration of justice and police within the district; and to direct and control other matters which may be specially subjected to the control of the said district councils, by any law of the governor and Legislative Council of the colony. No fine or penalty to be imposed by the district councils exceeding £10 sterling. No tax to be levied on property belonging to the crown; and copies of all bye-laws to be laid before the governor for his assent, and might be disallowed by him within two calendar months after the receipt of said copies. By clause 47 of this act, 5 & 6 Victoria, it was enacted that one-half of the expense of the police establishment of the colony (exclusive of the convict establishment) should be defrayed out of the general revenue arising from taxes, duties, rates, and imposts levied within the colony, and *the other half to be defrayed by assessment upon the several districts of the colony, in such proportion as should be, from time to time, fixed by the governor and Legislative Council.* The amount so fixed to be paid by the treasurers of the several district councils according to the warrants of the governor, to whomsoever he may appoint; and if the treasurers had not sufficient money in hand, the district council must levy a fair and equal rate upon all property within the district; and if this be not done, a power of distress and sale might be issued by the governor on the goods of the district treasurer, members of the said district council, or inhabitants of the district.

The foregoing are the leading points in the act 5 & 6 Vict., c. 76. Under it the Legislative Council was established, and now holds its annual sittings; and Sydney and Melbourne were created corporations by charter: they have each a mayor and court of aldermen, who have exercised beneficially the duties entrusted to them, and contributed to the welfare of the inhabitants of each city. Soon after the act 5 & 6 Vict. came into operation, the then governor, Sir G. Gipps, proceeded to issue

charters for the establishment of twenty-nine district councils, choosing for the boundaries the police divisions rather than those of the counties; over each district council a warden was appointed, and district councillors were selected from the most influential and respectable persons resident in each district. The following is a return, issued from the surveyor-general's office, dated July 31, 1844, showing the number of acres contained in each district, for which a district council is provided, and the extent of the land alienated by the crown, in each respectively:—

District.	Alien- ated.	Unalien- ated.	Total.
NEW SOUTH WALES:—	Acres.	Acres.	Acres.
Macquarie	116,672	2,395,321	2,512,000
Raymond Terrace and Dungog	331,159	1,620,728	1,951,887
Paterson	168,283	104,960	273,243
Maitland	145,318	108,682	254,000
Patrick's Plains	251,784	151,500	403,284
Merton and Muswell- brook	149,818	542,080	691,898
Scone and Murrurundi	237,885	841,600	1,079,485
Cassilis	283,051	1,198,000	1,481,051
Mudgee and Wellington	244,787	2,035,135	2,279,922
Wolombi and M'Donald	97,173	958,827	1,056,000
Newcastle	35,868	76,160	112,028
Brisbane Water	57,054	300,800	357,854
Sydney	58,102	82,631	140,733
Paramatta	87,169	63,936	151,105
Windsor	92,059	429,630	521,689
Penrith	129,191	247,898	377,089
Liverpool	64,008	39,900	103,908
Appin and Campbell- town	51,361	82,603	133,964
Camden, Narellan, and Picton	129,386	340,000	469,386
Hartley	80,647	1,279,882	1,360,529
Bathurst and Carcor	715,236	2,719,858	3,435,094
Yass	146,387	965,099	1,111,486
Goulbourn	590,714	955,920	1,546,634
Berrima	90,169	360,676	450,845
Illawarra	137,917	432,640	570,557
Braidwood and Broulee	262,060	1,399,133	1,661,193
Queanbeyan	403,201	806,402	1,209,603
PORT PHILLIP:—			
Bourke	156,640	5,027,360	5,184,000
Grant	59,854	5,412,146	5,472,000

In October, 1843, the Legislative Council passed a resolution, that it was highly inexpedient, even if possible, to cast any portion of the police expenditure on the country districts, and that this expenditure ought to be defrayed, as hitherto, out of the general revenue. The same course was adopted the ensuing year; and the governor found himself unable to carry out the intentions of the act 5 & 6 Vict., by the unwillingness of the colonists to become members of the district councils. Mr. Deas Thompson, the

experienced secretary to the government of New South Wales, in a useful analysis of the proceedings relative to the district councils, dated 27th March, 1847, says—

“It may not be altogether irrelevant now to inquire how far the establishment of municipal institutions in the country districts has been favourably received by the inhabitants. If we may judge by the result of the elections in the different districts, the possession of this privilege is looked upon, at least in a great many of them, with much indifference—an indifference which appears to have annually increased since their first establishment. The following summary, showing the number of members elected, and nominated by the governor in default of election, to fill the annual vacancies of one-third, under the charter, will sufficiently illustrate the truth of this conclusion: viz.—

1844 . . . elected, 67: nominated, 0 = 67.
1845 . . . elected, 51: nominated, 14 = 65.
1846 . . . elected, 38: nominated, 32 = 70.

“Thus, during the three years in question, there were 156 persons elected, and forty-six nominated by the governor. It is also undoubted, that of those elected, a considerable proportion did not consist of the persons most eligible for so important a trust, a great disinclination being understood to prevail amongst many highly respectable persons to accept the office. It appears that (with the solitary exception of the sum of £170, raised by the district council of Grant) in none of the districts was any revenue whatever raised by assessment. In several, debts have been incurred in payment of the salaries of the officers appointed by the council; but the refusal of the Legislative Council to grant the additional facilities necessary to enable these bodies to levy the assessments when made, and the strong opinions expressed in debate of the risk which would attend their enforcement, seem to have entirely paralyzed the endeavours of the several district councils to exercise their legitimate powers.”

Paramatta was almost the only exception to the total inactivity which characterized the district councils. The Legislative Council would lend no assistance to the executive government in giving effect to this part of the constitution of the colony; and, reasoning from a connected series of facts on the subject, Mr. Thompson thus recapitulates the conclusions at which he arrived:—

“1st. That district councils have, from the causes mentioned, entirely failed to answer the object contemplated in their establishment.

“2nd. That there is at present only one in active operation, and this one is sustained only by contributions from the government, and not by assessment raised under the powers granted to it under the act.

“3rd. That these institutions, in their present form, are not adapted to the state of society in this colony.

“4th. That so far as the Legislative Council or the public at large is concerned, they are not regarded in any favourable light.

“Such are the general conclusions at which I am forced to arrive, from a full consideration of all the circumstances I have detailed. I am by no means prepared to say, however, that, with considerable

modification, they may not be adapted to the peculiar circumstances of the colony; but this can only be done by leaving all legislation on the subject to the local legislature. No doubt, as has been experienced in other colonies, there may be an indisposition on the part of the Supreme Legislature to grant to any other bodies concurrent powers of taxation; but for mere local purposes it is scarcely to be apprehended that this would be refused, especially when it would have the effect of relieving the general treasury from heavy burdens, which it can ill afford to bear.”

In the Port Phillip division of the colony district councils were established in the counties or districts of Bourke and Grant. Mr. Latrobe, the superintendent of Port Phillip, stated, in September, 1846, that they had then been in existence four years; but it was not in his power “to point out a single instance or particular, in either case, in which the object of these establishments had been attained. There has not (he says) been one road made or repaired under their charter; not one school established; not one public building erected; and not one farthing raised or applied to the support of a district police, or to the administration of justice.”

This summary of the principal facts connected with the district councils, will enable the reader to understand better the necessity of a new constitution for New South Wales, and the basis on which it was subsequently proposed to found it. Previous to proceeding chronologically with the legislative history of the colony, it should be remarked, that the Legislative Council of two-thirds elective, and one-third nominated members, as provided by the act 5 & 6 Vict., had worked well, and passed several useful colonial laws. The distribution of the elective franchise was (according to Mr. Braim), in 1844, when the population was 130,856, as follows:—

District.	Number of Electors.	Number of Members returned.
Sydney	2,823	2
Cumberland, County .	1,344	2
Camden	386	1
Northumberland . .	369	1
Durham	345	1
Melbourne	591	1
	5,858	8
Eleven other Districts	2,619	16
Total	8,477	24

A committee of the Legislative Council in New South Wales recommended that leaseholders of and at a rental of £20 per an-

num, or squatters possessed of 200 cattle or 1,000 sheep, should have a vote. During the last four years, the attention of her Majesty's government has been specially directed to a consideration of the governmental state of the Australian colonies, and to the granting of representative assemblies to these settlements.

On the 31st July, 1847, Earl Grey, her Majesty's secretary of state for the colonies, addressed an able despatch to Sir Charles Fitzroy, governor of New South Wales, in which his lordship stated, that her Majesty's government adopting, in general, the reasonings of Sir G. Gipps (the late governor of New South Wales), and of the majority of the executive council, had submitted to the queen their opinion, that Parliament should be recommended to impart to her Majesty the authority necessary for carrying into effect the separation of the Port Phillip district from the rest of the colony of New South Wales. Earl Grey, in expressing his own conclusion for the separation of Port Phillip from New South Wales, remarks, that it rested mainly on the principle, that all affairs of merely local concern should be left to the regulation of the local authorities; and proceeds to state, that if local self-government is necessary for the good of the whole colony, it is not less necessary for the good of the several districts of which it is composed; and his lordship adds—

“For this reason it was that Parliament provided for the erection, throughout New South Wales, of municipal corporations, which should, in various respects, balance and keep in check the powers of the Legislative Council. By this method it was supposed that the more remote districts would be able to exercise their fair share of power, and to enjoy their proper influence in the general polity of the whole province. But the result has disappointed this expectation. The municipalities have only a nominal existence. The Legislative Council has absorbed all the other powers of the colonial state. The principle of self-government in the districts the most remote from Sydney is therefore acted upon almost as imperfectly as if the conduct of local affairs had remained under the same management and institutions as those which the existing system superseded.”

The secretary of state then announces the intention of her Majesty's government to propose to Parliament some changes in the existing constitution of New South Wales, consequent on the separation of the Port Phillip district. In indicating the general principles on which it was proposed to legislate, Earl Grey stated, that in revising the constitution of New South Wales, her Majesty's government was still favourable

to the creation of local authorities, such as the district councils, especially with a view to their “being made to bear to the House of Assembly the relation of constituents and representatives.” The despatch however, on this point, is vague and inconclusive. Earl Grey, indeed, expressed his desire to be relieved of the responsibility of proposing such a change, by obtaining “the most complete local intelligence, supported by the most eminent local authorities.” In one paragraph in this despatch, his lordship expresses a decided feeling in favour of the establishment of two distinct houses of legislation:—

“You are aware that, in the older British colonies, the legislature, as in New South Wales, is generally composed partly of nominees of the crown, and partly of the representatives of the people; but there is this important difference between the two systems—that in the one case the legislature is divided into two separate houses and chambers; in the other, the representatives of the people and the nominees of the crown form a single body, under the title of the Legislative Council. It does not appear to me that the practical working of this last system would by any means justify the conclusion, that it is an improvement upon that which it was formerly the practice to adopt; on the contrary, *I see many reasons for belief, that the more ancient system, by which every new law was submitted to the separate consideration of two distinct houses, and required their joint consent for its enactment, was the best calculated to insure judicious and prudent legislation.*”

Finally, the secretary of state concludes with the following sentiment, worthy of his lordship's high station:—“I need scarcely add, that it will be a source of the highest gratification to me, if, under the authority of Parliament, the colonial governments of Australia can be settled on a basis on which the colonists may, under the blessing of Divine Providence, themselves erect institutions worthy of the empire to which they belong, and of the people from whom they are descended.”

On the receipt of this despatch, of July 31, 1847, in New South Wales, the governor, Sir Charles Fitzroy, caused it to be printed for general circulation; a storm of opposition was immediately created against the proposition of perpetuating the district councils, and of delegating to them the right of electing representatives to legislate for the colony.

The colonists considered that it would be utterly impossible ever to bring those councils into effective operation; that the power and authority with which they were invested would centre in the governor; that they would be virtually deprived of the existing

elective franchise; that there were to be two legislative houses—one appointed by the crown, and dependent only on the government—the other subservient only to the district councils, by whom its members would be elected—so that neither house would be independent; and that the making their colony the subject of a theoretical experiment in legislation was a measure of which they could never admit the policy or justice. But there was nothing in the despatch of Earl Grey, expressed or implied, to justify the violent language used at some of the public meetings in the colony; and from no previous colonial minister had the colonists met with a larger concession to liberal principles; the fault—if I may use the term—lay in the indefinite wording of the despatch, and the absence of any determined line of policy on the part of her Majesty's government.

Among the documents emanating from the colonists, on this occasion, was a petition from the magistrates, landholders, and residents in the district of Picton, county Camden (New South Wales), to the governor, Sir Charles Fitzroy, and forwarded by his excellency to Earl Grey, March 27, 1848 (received August 7, 1848), which sets forth the objections to the then proposed alteration in the constitution of New South Wales:—

"Your petitioners have learned, with much regret and dissatisfaction, that it is the intention of her Majesty's government to alter the present constitution of the colony, and substitute in its stead a form of representation totally at variance with all their ideas of liberty, and utterly repugnant to every British colonist.

"Your petitioners would respectfully point to their own district, in order to show that it will be impossible to carry out such a scheme as is detailed in the despatch of Earl Grey to your excellency. The district contains an area of nearly 600 square miles, and the population only numbers 1,200, according to the last census; while there is but one village in the whole district, containing about 120 persons, and distant only fifty miles from Sydney. By the last electoral list there appears to be sixty-eight voters, but the number would be considerably increased if the franchise was extended to leaseholders.

"Your petitioners would also beg to remark, that not only would it be impossible to establish district councils in any shape, but at present there is even a difficulty in finding properly-qualified persons to act as local magistrates; and your petitioners believe that there are other districts similarly situated in the colony.

"Your petitioners would particularly call the attention of your excellency to that part of the despatch where it is admitted that 'the intention of Parliament to create local authorities (district councils) has hitherto been defeated;' but the fact of such a dan-

gerous and iniquitous power being given to any government officer, as detailed in clause 49 of the present Constitutional Act, (5 & 6 Vict., c. 76), is quite sufficient of itself to account for that part of the act not having been carried out.* And your petitioners are convinced, that all future attempts of this nature will, in like manner, be defeated."

The inhabitants of Windsor (New South Wales), in a petition to the Queen, in 1848, in common with all the other addresses to the sovereign, express the following sentiments:—

"We, the undersigned inhabitants of the district of Windsor, in the colony of New South Wales, beg, in approaching your Majesty, to express our ardent and devoted loyalty to your Majesty's person and government, and our fervent desire that it may be permitted to you, by Divine Providence, long to sway the British sceptre with much prosperity and glory."

After deprecating the changes proposed in the constitution of New South Wales, as intimated in the despatch of her Majesty's secretary of state, under date July 31, 1847, and addressed to the governor of the colony, the petitioners thus proceed:—

"As natural born subjects of your Majesty, we consider ourselves entitled to equal rights and privileges with our fellow-subjects in the United Kingdom; and we earnestly deprecate the changes alluded to, as laying the axe to the very root of those rights and privileges, by depriving us of the most valuable of them—the being present, by immediate representation, in the Assembly where are enacted the laws by which we are governed. We are most desirous to enjoy a constitution as nearly as may be alike to that of the United Kingdom; and we accordingly think it due to the colonists, that no measure of magnitude should be passed at home, affecting the colony, without their previous assent."

After a protracted debate on the subject in the Legislative Council of New South Wales, in April, 1848, the Council recorded no opinion; but their views were adverse to the proposed changes. One of the motions, and the mode in which it was disposed, as also a classification of the voters, explains in some degree the state of parties in the colonial Legislative Council.

Question proposed.—That this committee do agree to the following resolution:—"That this Council is disposed to view favourably the proposition of separating the deliberations of the nominees of the crown from those of the representatives of the people."—(Mr. Cowper.)

Question put.—That the word "not" be inserted before disposed, and the words "but that the cession of the territorial revenue, or of the Schedules A, B, and C, to the appropriation of this Council, would be

* The clause refers to the power of distress and sale given to the governor over the goods of the district treasurer, district councillors, or district electors, in the event of the district not paying the amount leviable by the governor for the police-rate in the district.

an amendment in the present constitution," after the word people.—(Mr. Wentworth.) Committee divided:

Ayes, 10.	Noes, 11.
* Mr. Murray.	† Major-gen. Commanding
* Mr. Wentworth.	† Colonial Secretary.
* Captain O'Connell.	† Mr. Allen.
* Mr. Bowman.	* Mr. Foster.
* Mr. Lord.	† Attorney-general.
* Dr. Bland.	* Mr. Lowe.
† The Collector of Customs	† Mr. Berry.
* Mr. Danger.	* Mr. Macarthur.
* Captain Dumaresq.	† Mr. Darvall.
Mr. Robinson (Teller.)	* Mr. Cowper.
	† Col. Treasurer (Teller)
Elected, 9; official, 1; total, 10.	Elected, 4; official, 4; nominees, 3; total, 11.

Original question put.	Committee divided.
Ayes, 11.	Noes, 10.
† Attorney-general.	* Captain O'Connell.
† Colonial Secretary.	* Mr. Bowman.
† Colonial Treasurer.	* Mr. Wentworth.
* Mr. Lowe.	* Mr. Dangar.
† Mr. Berry.	* Mr. Lord.
* Mr. Macarthur.	* Dr. Bland.
† Mr. Darvall.	* Mr. Murray.
† Mr. Allen.	* Captain Dumaresq.
* Mr. Foster.	† Collector of Customs.
† Major-gen. Commanding	* Mr. Robinson (Teller.)
* Mr. Cowper (Teller.)	
Elected, 4; official, 4; nominees, 3; total, 11.	Elected 9; official, 1; total, 10.

Note.—Those marked thus * are elected; thus †, official; and thus ‡, nominees.

The governor, in a despatch to her Majesty's secretary of state (dated 11th August, 1848, received, 19th January, 1849), conveying the details of the debate in the Legislative Council, thus expresses his own opinions in favour of two legislative chambers:—

"Your lordship will not fail also to observe that the main point of difference which led to the result was the question of the establishment of a Legislative Council distinct from a Representative Assembly, and a perusal of the debates which took place on this question will make your lordship acquainted with the fact, that the opposition that was raised to the constitution of these two legislative bodies was not grounded upon any principle of government, but simply and avowedly upon the assertion that a Legislative Council interposed between the executive government and the Representative Assembly would render the former more independent of the latter, and therefore not so liable to be controlled by the fear of coming into direct collision with it.

Having thus endeavoured to put your lordship in possession of the proceedings of the Council as briefly as was consistent with a clear explanation of them, it only remains for me to add my own opinion, which is, I believe, confirmed by that of the most experienced and unprejudiced persons who have watched the working of the present constitution of this colony, that the assimilation of the constitution of this colony to that of the older British colonies, where distinct legislative bodies exist, would be generally considered to be extremely advantageous to its interests, but that the introduction of the double scheme of election, by mak-

ing the district councils the constituents of the House of Assembly, would be most unpalatable to the whole community, and would excite throughout the colony a resistance which would in all probability render it inoperative, while it would not fail to create an ill-feeling towards her Majesty's government, which would not easily be allayed."

The language used by Sir William Denison, the governor of Van Diemen's Island, in a letter to her Majesty's secretary of state, dated 15th August, 1848, and received in London, 10th March, 1849, is very conclusive on the point expressed by the governor of New South Wales, and deserves record; but his expression as to the character of the people, in making wealth their sole consideration, is far too general and unqualified a censure on the colonists of New South Wales; yet, were it not so, they would have some excuse, in the absence of honorary distinctions—of prizes for emulation—and other gratifications, apart from or contrary to those of self-indulgence.

Sir William Denison, although writing under the idea that an act providing for a Representative Assembly in Van Diemen's Island, might already have been passed by the Imperial Parliament, nevertheless deemed it his duty not to withhold any information which might enable the secretary of state "to form a judgment as to the nature of the institution best adapted to secure the permanent welfare of these colonies."

His excellency thus proceeds:—

"Without, therefore, wishing or presuming to give an opinion on the general question of the best form of legislative body, I may say that, under the peculiar circumstances of these colonies, I should most strenuously recommend the adoption of a second or upper chamber.

"When we consider the elements of which society here is composed,—when we see the low estimate that is placed upon everything which can distinguish a man from his fellows, with the sole exception of wealth—when we see that even wealth does not lead to distinction, or open the road to any other ambition than that of excelling in habits of self-indulgence—it can hardly be subject of surprise that so few are found who rise above the general level, or that those few owe more to the possession of a certain oratorical facility than to their powers of mind or the justness of the opinions which they advocate.

"The broad plain of equality, as in America, receives the whole of the community; and though there are many who would gladly avail themselves of any opportunity of raising themselves above the general level, yet here, as in America, any attempt to do so would be frustrated by the jealousy of the remainder of the community.

"Your lordship can hardly form an idea of the character of the population of these colonies.

"It is usual to assume that colonies are off-shoots from the parent stock, containing in themselves the germs of all the elements of which society in the mother country is composed.

"This can only be said of any colony with many reservations, but it cannot be said of these colonies with any appearance of justice or truth.

"There is an essentially democratic spirit which actuates the large mass of the community; and it is with the view to check the development of this spirit, of preventing its coming into operation, that I would suggest the formation of an upper chamber."

"The members of this, call it senate or what you may, will be raised in some measure above the general level of society—they will be rendered independent of popular blame or approbation—but, being also free from the suspicion of acting under the control of the government, they will conciliate popular feeling between the executive and the legislature.

"I do not presume to enter into any detail of the mode in which such an assembly should be constituted, further than to express an opinion that the government should have as little as possible to do in the nomination or selection of the members.

"There must, of course, be some ex-officio representatives of the government in the house. The bishops of the church of England and Rome might sit as representatives of the ecclesiastical bodies; but as the object with which I advocate the establishment of a second chamber, is more that of operating morally upon the body of the community, than of facilitating generally the operations of the executive government, I should be loth to recommend the adoption of a plan which might in any way neutralize the beneficial action of such a body upon the mass of the people.

"I also think that, in order to render the members perfectly independent of either the government or the people, they should be appointed or elected for life.

"Trusting that your lordship will not be of opinion that, in offering these suggestions, I have in any way exceeded the limits imposed upon me by my position in this colony."

On the 31st of July, 1848, her Majesty's secretary of state, in a despatch to Sir Charles Fitzroy, the governor of New South Wales (which was written before the receipt of the preceding letters from the governors of New South Wales and Van Diemen's Land, or of the petitions or the resolutions of the Legislative Council of New South Wales), says:—

"I collect from the documents now before me, that the objections most strongly felt throughout the colony to the views propounded in my despatch, relate to the project of making the district councils serve as constituent bodies to the legislature; and, though in a less degree, to the division of the legislature into an assembly and a council, according to the ordinary pattern of the governments of those colonies which derive their free institutions from Great Britain."

It does not appear to me, from the documents laid before Parliament, that the colonists did object generally to two houses of legislature, according to the old established form of colonial government (except in one instance of comparatively trifling moment); their objection lay to two houses—one nominated by the crown or governor, and

the other by district councils—because the latter would also be under the influence of the governor.

I cannot but imagine that Earl Grey, in his sincere wish "not to impose upon the inhabitants of the colony a form of government not, in their judgment, suited to their wants," did not think it necessary to advise the carrying of his proposal into execution; and considered that the interests of the colonists would be better served, by leaving in their own hands the power of establishing two houses of legislature, whenever they shall have reason to do so. His lordship stated, in his despatch of 31st July, 1847, that he concurred in opinion with the governor of New South Wales, that the division of the legislature into council and assembly, founded, as it is, on long practical experience, would be a decided improvement upon the present form of the legislature in New South Wales; and, if the general feeling of the colony had responded to it, his lordship would have had no hesitation in advising her Majesty's government to lay before Parliament the measures necessary to accomplish the change. It being too late in the session of 1848, to introduce a bill for the separation of Port Phillip from New South Wales, and for the granting of Legislative Councils to the other Australian colonies, and for the general regulation of the affairs of the whole of the colonies, the secretary of state appears to have laid the subject before a committee of the lords' committee of the Privy Council, appointed for the consideration of all matters relating to trade and plantations, such committee consisting of several cabinet ministers and privy councillors, accustomed to the discussion of colonial matters.

On the 1st May, 1849, a court was held at Buckingham Palace before the queen, when a report of the lords' committee of the Privy Council for trade and plantations, was read, relative to a bill to be introduced into the Imperial Parliament for the "better government of the Australian colonies."

The following is an abstract of the leading points in the report:—In the ancient possessions of the British crown, which at present form so large a part of the United States of America, and in all the other British colonies, whether acquired by the occupation of vacant territories or by cessions from foreign powers, there prevailed until the commencement of the nineteenth century the almost invariable usage of establishing a

local legislature, consisting of three estates—that is, of a governor appointed by the sovereign, of a council nominated by the sovereign, and of an assembly checked by the people. During the nineteenth century, the crown acquired sixteen colonies, in no one of which has the whole colonial polity of a governor, council, and assembly been introduced; it has however been the practice of parliament to recognize the ancient principle, and to record the purpose of resuming the former constitutional practice so soon as the causes should have ceased to operate, which in each particular case had forbidden the immediate observance of it. The pledge has been redeemed in New South Wales, except so far as relates to the combination which has taken place there, of the council and assembly into one legislative house or chamber; and it has been also redeemed with regard to New Zealand, although peculiar circumstances have required a temporary postponement of the operation in that colony of the act passed by Parliament for establishing in it a representative legislature.

With regard to South Australia, and to Van Diemen's Island, (and also to Western Australia when the settlers shall be able and willing to sustain from their local revenues the expense of their own civil government, which is now provided annually by a grant of the Imperial Parliament,) the committee are of opinion that the time has arrived when parliament may properly be recommended to institute in each of these colonies "a legislature in which the representatives of the people at large should enjoy and exercise their constitutional authority;" and that on the separation of Port Phillip (which the committee suggest should be named *Victoria*, after her Majesty) a legislature should also be created in which the representatives of the people should exercise their constitutional authority and influence.

As to the nature of the legislatures to be established in the several Australian colonies, the committee say—

"If we were approaching the present question under circumstances which left to us the unfettered exercise of our own judgment, we should advise that Parliament should be moved to recur to the ancient

constitutional usage, by establishing in each a governor, a council, and an assembly. For we think it desirable that *the political institutions of the British colonies should thus be brought into the nearest possible analogy to the constitution of the United Kingdom*. We also think it wise to adhere as closely as possible to our ancient maxims of government on this subject, and to the precedents in which those maxims have been embodied. *The experience of centuries has ascertained the value and the practical efficiency of that system of colonial polity to which those maxims and precedents afford their sanction*. In the absence of some very clear and urgent reason for breaking up the ancient uniformity of design in the government of the colonial dependencies of the crown, it would seem unwise to depart from that uniformity. And further, the whole body of constitutional law which determines the rights and the duties of the different branches of the ancient colonial governments having, with the lapse of time, been gradually ascertained and firmly established, we must regret any innovation which tends to deprive the Australian colonies of the great advantage of possessing such a code so well defined and so maturely considered.

"But great as is the weight that we attach to these considerations, the circumstances under which we actually approach the question are such as to constrain us, however reluctantly, to adopt the opinion that the proposed Act of Parliament should provide for the establishment in each of the four Australian colonies of a single house of legislature only; one-third of the members of which should be nominated by your Majesty, and the remaining two-thirds elected by the colonists."

The grounds on which the committee arrived at this conclusion were, that a single chamber already legislated for New South Wales and Port Phillip; that it did not appear advisable to alter it, and that the other Australian colonies ought not to have a different legislative system.

They however recommended that the several provincial legislatures should have the power of "amending their own constitutions by resolving either of these single houses into two houses of legislature, subject to the approval of the crown; that the governor-general of Australia should have power to convene a General Assembly of not less than twenty nor more than thirty delegates, to be elected by two or more of the provincial legislatures, and that this General Assembly should have full power over the disposing and proceeds of the crown lands in Australia; the imposition of custom duties, and other general subjects."* The whole colonial revenues to be surrendered to the colonists,

* It is a grave question, and demands serious consideration, whether the crown ought to give up its rights to the disposal of the waste lands in the colonies. Those lands, I think, ought to be viewed as the patrimony of the people of England, and to be rendered available for the maintenance of her labouring poor, who, unable to obtain remunerative employment at home, are desirous of seeking, in another

and less densely-peopled portion of the empire, the subsistence and the means of elevation which is denied them by the over-crowded state of population in the United Kingdom. It is one thing to lay so high an upset price on land, as in New South Wales, as to stop its sale either in the colony or in England; it is quite another thing to give up all control, on the part of the crown, over those lands which have

except a civil list to be settled upon the crown, of an amount sufficient to defray the expenses of those services which it would be inexpedient to have to be provided for by annual votes of the respective legislatures; and a revision of the annual appropriation of the sum of £30,000 now voted from the revenues of New South Wales and Port

Phillip, for the support of public worship among the different churches of England, Scotland and Rome, and the Wesleyan Society; the distribution of which is deemed to be too strongly in favour of the Church of England, to be made on the basis of the following calculations; and the sum to be increased to £33,560 per annum :—

Voted by Legislative Council, for Religious Purposes.	In the present undivided colony of New South Wales.												
	Church of England.			Church of Rome.			Church of Scotland.			Wesleyans.	Total.		
	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£
Distribution of £30,000 according to Census of 1841 (existing arrangement)	17,581	2	4	8,510	14	6	3,136	9	11	771	13	3	29,998
Distribution of £30,000 according to Census of 1846	15,715	0	0	9,333	0	0	3,634	0	0	1,316	0	0	29,998
Sums which, according to the Census of 1846, will correspond with the sum now enjoyed by the Church of England, according to the Census of 1841.	17,581	0	0	10,441	0	0	4,066	0	0	1,472	0	0	33,560

According to the census of 1846, the distribution would be—New South Wales—Church of England, £14,812; Victoria—£2,769: ditto, ditto—Church of Rome, £8,757 and £1,684: ditto, ditto—Church

of Scotland, £2,979 and £1,087: ditto, ditto—Wesleyans, £1,176 and £296.
The following is the census of the various religious denominations in 1841 and 1846, upon which the above calculations are founded :—

Years.	Church of England.		Church of Rome.		Church of Scotland.		Wesleyans.	
	Sydney District.	P. Phillip District.	Sydney District.	P. Phillip District.	Sydney District.	P. Phillip District.	Sydney District.	P. Phillip District.
Population, 1841	67,537	6,190	33,249	2,441	11,009	2,144	2,586	650
Population, 1846	79,810	14,923	47,187	9,075	16,053	5,856	6,338	1,597

The report having been approved by the queen in Council, the secretary of state proceeded to act on it, and on the 11th of February, 1850, a bill for the better government of her Majesty's Australian colonies, proposed by her Majesty's ministers, was brought into parliament; and the 19th of February following, this bill was read a second time. The following is an abstract of its leading provisions :—

1. The district of Port Phillip to be separated from the Sydney or Middle district, commonly called New South Wales; and, after separation, to be named Victoria, and to constitute a separate colony; and its boundaries on the north and north-east to be a straight line drawn from Cape Howe to the nearest source of the river Murray, been acquired, in past years, by the valour, skill, and patriotic spirit of Englishmen. If the crown, its ministers, and the legislature of the United Kingdom declare they are unable to frame a system of representative colonial government, and to deal effectively

and thence, by the course of that river, to the eastern boundary of the colony of South Australia.
2. That New South Wales and Port Phillip shall each possess a Legislative Council; the number of members in the said councils to be liable to variation, and to be determined by the respective governors in council; and one-third of the whole number of each council to be appointed by the crown or its representative, the governor of the colony, and the remaining two-thirds to be elected by the inhabitants of the colonies, according to the electoral districts and franchises which may be established by the governors in council.
3. Legislative councils to be established in South Australia and in Van Diemen's with the proceeds of the sale of crown lands for the promotion of emigration, then there is no alternative but to permit the colonists to construct their own constitution, and to hand over to them the vast and valuable domains of the crown in their respective territories.

Island, not exceeding in number twenty-four each, of whom one-third shall be appointed by the crown. The electoral districts, the franchise, the representative qualification, and the laws for the regulation of the said councils, to be determined by the colonial councils or legislatures, when created.

4. A similar legislative council may be established in Western Australia, as soon as its colonists defray such part of the expenses of the civil establishments as is now defrayed by parliamentary grant.

5. The governors and Legislative Councils of New South Wales, Port Phillip, South Australia, Van Diemen's Island, and Western Australia have hereby authority to make laws for the peace, welfare, and good government of the said colonies respectively; and, subject to the provisions of the following civil lists, may appropriate to the public service the whole of her Majesty's revenue within such colonies, arising from taxes, duties, rates, and imposts levied on her Majesty's subjects in said colonies: provided that such law be not repugnant to the law of England, or interfere in any manner with the sale or other appropriation of the lands belonging to the crown within any of the said colonies, or with the revenues thence arising. The governor must first authorise the specific appropriation of any sum of money, before it can be passed by the Legislative Council; and the money cannot be lawfully issuable except in pursuance of warrants under the hand of the governor of the said colony, directed to the public treasurer thereof.

The schedules, or civil lists, referred to in the foregoing are—

NEW SOUTH WALES.

Governor	£5,000
Chief Justice	2,000
Two Puisne Judges	3,000
Salaries of the Attorney and Solicitor-General, Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	19,000
Colonial Secretary, and his department	6,500
Colonial Treasurer, and his department	4,000
Auditor-General, and his department	3,000
Salary of Clerk, and miscellaneous expenses of Executive Council	500
Pensions	2,500
Public Worship	28,000

VICTORIA.

Governor	2,000
Judge	1,500
Salaries of the Attorney-General and Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	5,000

Colonial Secretary, and his department	£2,000
Colonial Treasurer, and his department	1,500
Auditor-General, and his department	1,100
Salary of Clerk of Executive Council, and miscellaneous expenses	400
Pensions	500
Public Worship	6,000

VAN DIEMEN'S LAND.

Governor	2,000
Chief Justice	1,500
Puisne Judge	1,200
Salaries of Attorney and Solicitor-General, Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	13,300
Colonial Secretary, and his department	2,800
Colonial Treasurer, and his department	1,800
Auditor-General, and his department	1,600
Salary of Clerk of Executive Council, and miscellaneous expenses	700
Pensions	2,000
Public Worship	15,000

SOUTH AUSTRALIA.

Governor	2,000
Judge	1,000
Salaries of the Advocate-General and Crown Solicitor, and contingent and miscellaneous expenses of the administration of justice throughout the colony	5,000
Colonial Secretary, and his department	2,000
Colonial Treasurer, and his department	1,500
Auditor-General, and his department	1,000
Salary of Clerk of Executive Council, and miscellaneous expenses	500
Pensions	—

The schedule, or civil list, for Western Australia to be not less in amount than the sum which may have been last authorized by Parliament to defray the charge of the civil establishment, in the year previous to the assembling of a Legislative Council.

6. The governors and Legislative Councils of the several colonies may alter all or any of the sums mentioned in the foregoing schedules, and the appropriation of such sums to the services and purposes therein stated; but such alteration cannot take effect without the signification of her Majesty's pleasure thereon, and any saving which may accrue from such alteration shall be applied to such purposes connected with the administration of the colony, as to her Majesty shall seem fit.

7. The district councils and the district police rate to be established by Act 5 & 6 Vict., c. 76, s. 41, in New South Wales, are avoided, and any letters patent issued under that Act, are revoked; but the governor may, upon petition made to him, grant charters under the great seal of the colony, and the same may take place in the other colonies in Australia.

8. The authority of the crown to disallow certain laws and ordinances is preserved.

9. The governor and Legislative Councils may impose and levy import custom duties, subject to the provisions of this act, and provided that no new duty be imposed upon the importation of any article at a higher rate than that levied upon the produce or manufacture of another country; *i.e.*, the colonies must have no discriminating duties.

10. The colonial legislatures to have full power to make further provisions for the administration of justice; to define the constitution of their courts of law and equity; and to regulate the jury law; a supreme court to be created in the new province of Victoria.

10. The existing boundaries of New South Wales and of Victoria may be altered by an order of the Queen in council; six months' notice to be given to either colony which shall not have petitioned for such alteration; and her Majesty may, on the petition of the inhabitants of the territories lying north of the thirtieth degree of latitude, erect the said territories into a separate colony.

11. The Legislative Councils of two or more of the above-named colonies may, by addresses to the governor-general of Australia, require the convocation of a general assembly, to consist of the governor-general and a house of delegates, to be elected by each Legislative Council, in the proportion of two for each colony, and one additional member for every 15,000 inhabitants in each colony; and this general assembly may make and vary its own constitution, subject to the confirmation of her Majesty in council. This general assembly to sit for three years, and then to be dissolved or prorogued by the governor-general.

According to the most recent censuses, the general assembly would be thus formed:

Colony.	Population.	Delegates.
New South Wales	155,000	12
Victoria	33,000	4
South Australia	31,000	4
Van Diemen's Island . . .	46,000	5
West Australia (about). .	—	3
Total	—	28

12. The general assembly of delegates may alter the acts 6 Vict., c. 36, and 9 and 10 Vict., c. 104, *for regulating the sale of waste lands belonging to the crown in the Australian colonies*, and may make laws for selling, demising, granting licences for occupation of, or otherwise disposing of the waste lands of the crown in the colonies represented in such

general assembly; and may impose, levy, and alter, or repeal duties of customs on the importation of goods into or from all the colonies represented in the general assembly, subjecting to appropriation to the public service of such colonies respectively by the separate legislatures thereof, such portions of the aggregate revenue as to such general assemblies may seem meet. The general assembly of delegates may also create and define the powers of a general supreme court of original jurisdiction or of appeal from the several courts of the respective colonies; post-office regulations; weights and measures; roads, canals, or railways traversing two or more of such colonies; the erection and maintenance of lighthouses and beacons; the imposition of shipping dues at any port or harbour within the said colonies; for the enactment of laws affecting the colonies represented on subjects which the respective Legislative Councils shall desire legislation; for the appropriation of such sums as may be necessary to the purposes designed by such legislation, and for the raising of such sums by an equal per centage on the revenues of all such colonies. But no duties to be levied upon articles imported for the supply of her Majesty's land or sea forces; and no duties, charges, prohibitions, exemptions, or privileges to be enacted contrary to or at variance with any treaty concluded by her Majesty with any foreign power.

13. The power of general assembly, if disputed, to be determined by her Majesty in council.

14. The governors and Legislative Councils, with the assent of her Majesty in council, may alter the Constitution of the Legislative Councils of their respective colonies; instead of a Legislative Council, as before provided, with one-third nominees of the crown, and two-thirds elected, they may establish a council, and a house of representatives, or other separate legislative houses, and vest in them the powers and functions of the Legislative Councils for which they may be substituted. But any bill passed for such purpose must be reserved for the signification of her Majesty's pleasure thereon, and be laid before both houses of parliament for at least thirty days before her Majesty's pleasure be signified.

15. The crown may nominate any of the governors of the Australian colonies governor-general of Australia.

There can scarcely be a doubt, that both the report of the committee of the Privy

Council, and the bill founded thereon, and introduced into parliament on the 11th February, 1850, have been dictated by the most liberal principles, and that her Majesty's government, in framing them, have sincerely desired to secure to the Australian subjects of the crown the fullest amount of political liberty. But granting the highest meed of praise to the ministers who propose to secure to Englishmen, in every British dominion, the inestimable blessing of free institutions; and to extend impartially to those who occupy even the most distant outposts of the empire, the privileges which their ancestors have gradually obtained, after centuries of sacrifice and struggle—it may be still fairly debated, whether the proposed new constitution for the Australian colonists, or the proposed plan of enabling them to make or amend their own form of government, is the course most likely to conduce to their ultimate well-being; and further, whether such course be compatible with their position as subjects of the British crown. The question happily invites discussion, and that of a nature most likely to elicit truth, and prompt to judicious and efficient measures, instead of forming the grounds of a mere party or parliamentary contest. There can be no difference of opinion as to the necessity of granting, as soon as may be, local self-government to the Anglo-Saxon race in Australia, to the furthest extent compatible with their relation to the sovereign of this realm. For the well-being of the Australians themselves, it is evidently very important, that whatever form of government be now granted, it should, at least for some years to come, be definitely settled by the Imperial Legislature, and not left to be a standing bone of contention among conflicting interests, by which the industrial proceedings of the colonists would be disturbed,—their feelings, if not indeed engaged in violent internecine democratic strife, at least kept in a state of feverish excitement, their attention being perpetually directed to the framing of constitutions which may not be agreed on for years to come, instead of their whole energies being engaged in the farther development and improvement of the resources of the fine country which already bears such indisputable proofs of their persevering and well-directed industry.

So far as the opinion of the colonists of New South Wales can be gathered from their petitions and recorded opinions, they object to the abrogation of their present

electoral franchise, by the transfer of their votes to electoral colleges or district councils, by which the elective power would be lodged in the hands of small irresponsible bodies, who practically would, in many instances, be nominated by the governor; and, even if that were not the case, would be probably directed by other influences than those of their constituents. But I cannot find throughout the official documents any conclusive expression against the establishment of two houses of legislature, such as now exist in Canada, Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland, Jamaica, and other possessions of the crown; and which, even in Canada, have worked well for the past ten years. My own opinions on this point have long been recorded; while advocating the fullest grant of political liberty to our colonies consistent with their relation to the parent and governing state, I have always contended, that the link of political connection should not depend merely on a governor representing the crown. In my work on the *Colonial Policy of the British Empire*, published in 1837, the opinions I then and still entertain, are expressed as follows:—

Centuries of experience have demonstrated the beneficial practical working of the British constitution in its three constituent, independent, and yet harmonizing branches of king, lords, and commons; and as far as it is possible, and at suitable periods, I would wish to see the colonies enjoying similar constitutions; the governor representing the crown, the legislative council the lords, and the house of assembly the commons. It must be gratifying to all friends of rational freedom to reflect, that England has ever been foremost in bestowing on her distant settlements the advantages of her own political institutes, thus evincing a true sense of justice; whereas, as Montesquieu rightly observes, a republic governs its conquered provinces with more absolute and intolerable sway than a monarchy, and its remote possessions suffer all the evils without enjoying any of the advantages of monarchical government. With certain limitations elsewhere explained, the colonies enjoy all the advantages of the British constitution, so far as is compatible with their situation as distant provinces of an empire. The limitation of exception is, that the Legislative Council is nominated by the crown for life, or during the official tenure of those civil servants who are *ex officio* entitled to a seat in the Legislative Council. A question has, however, been recently raised by a party in Lower Canada,* as to the advantage of making the Legislative Council an elective body, instead of being, as at present, nominated by the king through the secretary of state. However desirous I feel for the extension of just principles, I cannot—looking to the slow progress

* This chapter was written in October, 1836, and consequently, before the debates on Lower Canada, relative to an elective Legislative Council, came on in the British parliament.

of rational freedom, and remembering that moral and mental independence of character are essentially necessary to the due exercise of the elective franchise—I cannot desire, either in the mother country or in her colonies, two elective chambers.

It may be said that the upper house (Legislative Council,) would be chosen by a higher class of electors than those who return members to the lower house, and that, therefore, the popular voice would be more calmly exercised, and property would have its due weight in the making of laws for the country;* but it is impossible to deny that even the higher classes in England (and how much more so in the colonies) are, to a certain extent, liable to great excitement, that their will is not always under the control of their reason, and that in times of political effervescence they would be almost as subject to the influence of their stormy passions as their poorer, though equally honest brethren. Those who have not mixed in colonial society can have but a faint idea of the extent to which party feeling on political subjects arrives; the animosities thus produced are of the bitterest nature—poisoning the very core of society, and destroying even the peace of families. Now, looking at domestic tranquillity, security of person, lightness of taxation, and freedom from oppressive laws, as the great and desirable advantages of political institutes, it would be insanity or criminality to throw a firebrand into the small community of a colony, with a pretence of gaining some utopian object.

Independently, however, of social considerations, we have no instance on record of any state long maintaining its political freedom either under a single chamber of representatives, or under two elective chambers, the one holding no control or check over the other, and both at the mercy of fluctuating popular favouritism, jealousy, and caprice. Since the abolition of the hereditary chamber of peers in France, but few traces of liberty have remained to the people, and the restoration of an hereditary peerage is now seriously entreated. The very antagonistic forces which an hereditary and an elective chamber exercise, are essential to the preservation of the powers of both. Gibbon, in reference to the Roman republic, correctly observes—"as both the consuls and the tribunes in their public and private interests were averse to each other, their mutual conflicts contributed for the most part to strengthen rather than to destroy the balance of the constitution; but when the consular and tribunitian powers were united—when they were vested for life in a single person—when the general of the army was at the same time the minister of the senate, and the representative of the Roman people, it was impossible to resist the exercise, nor was it easy to define the limits, of his imperial prerogative."†

The United States may be cited, perhaps, as an example in favour of the adoption of two elective chambers; but it should be remembered, that a few centuries of such government must be experienced, ere we pronounce authoritatively on a subject which

* Mr. Labouchere, a gentleman whom I much respect, stated, in the Canada debate in the House of Commons on the 8th March, 1837, that the old American colonies of England had elective legislative councils; but it will be found that it was the chartered and not the crown colonies which had such assemblies. Adam Smith says, that in three of the governments of the New England colonies, the legislative councils were chosen by the representatives of

inspires with well-founded alarm, the most honest and able statesmen, who clearly see with Gibbon, that in elective monarchies the vacancy of the throne is a moment big with danger and mischief. We must wait and witness the effects of civilization, of a dense population, of adverse interests; we must watch the conduct of men who, like Marius and Cæsar, commenced by declaring themselves the protectors of the people, and ended by subverting the liberties of their country. Moreover, we should remember that the United States are a republic, and I do not think England is disposed to change her hereditary, constitutional monarch for an annual or quinquennial president.

Let us hear, however, the language of the most enlightened men of the United States on this important subject. Judge Story, himself a republican, in his commentaries on the constitution of the United States of America, in treating of the senate thus expresses his views on this topic: "Another and most important advantage arising from this ingredient is, the great difference which it creates in the elements of the two branches of the legislature; which constitutes a great desideratum in every practical division of legislative power. In fact, this division (as has been already intimated,) is of little or no intrinsic value, unless it is so organised, that each can operate as a real check upon undue and rash legislation. If each branch is substantially framed upon the same plan, the advantages of the division are shadowy and imaginative: the visions and speculations of the brain, and not the waking thoughts of statesmen or patriots. It may be safely asserted, that for all the purposes of liberty, and security of stable laws, and of solid institutions, of personal rights, and of the protection of property, a single branch is quite as good as two, if their composition is the same, and their spirit and impulses the same. Each will act as the other does; and each will be led by some common influence of ambition, or intrigue, or passion, to the same disregard of public interests and the same indifference to and prostration of private rights. It will only be a duplication of the evils of oppression and rashness, with a duplication of obstruction to effective redress. In this view the organization of the senate becomes of inestimable value." Again he says, "The improbability of sinister combination will always be in proportion to the dissimilarity of the genius of the two bodies; and therefore every circumstance consistent with harmony in all proper measures, which points out a distinct organization of the component materials of each, is desirable."

Another eminent writer on the constitution of the United States, the late chancellor Kent, in treating of the necessity of the powers of government being placed in separate hands, says: "The division of the legislature into two separate and independent branches is founded on such obvious principles of good policy, and is so strongly recommended by the unequivocal language of experience, that it has obtained the general approbation of the people of this country. One great object of this separation of the

the people; in Connecticut and Rhode Island, the governor was elected by the colonists; and in some the revenue officers who collected the taxes were assessed by the people. Pennsylvania, which was a proprietary government, was a scene of never-ending contentions, and the colonists even petitioned the king to take its affairs under the management of the crown.

† *Decline and Fall* vol i. p. 105.

legislatures into two houses acting separately, and with co-ordinate powers, is to destroy the evil effects of sudden and strong excitement and of precipitate measures, springing from passion, caprice, prejudice, personal influence, and party intrigue, and which have been found by sad experience, to exercise a potent and dangerous sway in single assemblies. A hasty decision is not so likely to arrive at the solemnities of a law when it is to be arrested in its course and made to undergo the deliberation, and probably the jealous and critical revision, of another and a rival body of men, sitting in a different place, and under better advantages, to avoid the prepossessions and correct the errors of the other branch. The legislatures of Pennsylvania and Georgia consisted originally of a single house.* The instability and passion which marked their proceedings were very visible at the time, and the subject of much public animadversion: and in the subsequent reform of their constitutions, the people were so sensible of this defect, and of the inconvenience they had suffered from it, that in both states a senate was introduced. No portion of the political history of mankind is more full of instructive lessons on this subject, or contains more striking proofs of the faction, instability, and misery of states under the dominion of a single, unchecked assembly, than those of the Italian republics of the middle ages, and which arose in great numbers, and with dazzling but transient splendour, in the interval between the fall of the western and eastern empire of the Romans. They were all alike ill-constituted, with a single unbalanced assembly. They were all alike miserable, and all ended in similar disgrace. Many speculative writers and theoretical politicians about the time of the commencement of the French revolution, were struck with the simplicity of a legislature with a single assembly, and concluded that more than one house was useless and expensive. This led the elder president Adams to write and publish his great work, entitled *A Defence of the Constitution of Government of the United States*, in which he vindicates with much learning and ability, the value and necessity of the division of the legislature into two branches, and of the distribution of the different powers of the government into distinct departments. He reviewed the history and examined the construction of all mixed and free governments, which had ever existed, from the earliest records of time, in order to deduce with more certainty and force this great practical truth, that single assemblies without check or balance, or a government with all authority collected into one centre, according to the notion of M. Turgot, were visionary, violent, intriguing, corrupt, and tyrannical dominations of majorities over minorities, and uniformly and rapidly terminating their career in a profligate despotism."

Mr. Jefferson, late President of the United States, in his remarks on the constitution of his native state, Virginia, says, "All the powers of government, legislative, executive, and judiciary, result to the legislative body. The concentrating these in the same hands is precisely the definition of a despotic government. It will be no alleviation, that these powers will be exercised by a plurality of hands, and not by a single one. One hundred and seventy-three despots would surely be as oppressive as one. Let those who doubt it, turn their eyes on the republic of Venice. An elective despotism is not the government

* Franklin's favourite but mistaken idea was a single legislature and a plural executive.

we fought for; but one which should not only be founded on free principles, but in which the powers of government should be so divided and balanced among several bodies of magistracy, as that no one could transcend their legal limits without being effectually checked and restrained by the others."

With reference, however, to the highly important consideration of having no check on the irregular exercise of popular power, the link that binds the colony to the mother country, so far as government can do so, would be materially, if not entirely injured by the substitution of an elective legislative council for one appointed by the crown through the functionaries of the state.

A governor, without any control over the two houses of legislature in a colony, would be reduced to a political cypher, and the adoption of the elective principle in a governor would soon take the place of his nomination by the king; in fact, the independence of, and separation from the mother country, would virtually occur, whether officially announced or otherwise, the colony thereby deriving all the advantages of the connection, while the parent state would lose everything which made the possession valuable to the empire.

It is not necessary to discuss here the relative advantages of the monarchical or elective principle in government; as before stated, the former has been tested by centuries in England, and found conducive to the greatest portion of happiness that a nation has yet possessed; so long, therefore, as a colony be united with Great Britain, it cannot be the desire or the interest of any practical statesman to alienate or weaken the just prerogatives and rightful power of the crown.

It seems to be totally forgotten by those who go the length of demanding an elective legislative council, that there is a wide difference between an imperial and a provincial government; that the former must of necessity have a control over the latter, so long as they maintain towards each other their relative positions of protecting and protected states. When the latter has ceased to be a colony, it is, of course, free to choose its own government, but so long as it remains in that state it has no right to ask, much less to demand, from the mother country democratic institutions which she herself does not possess, and the granting of which, if she did, would be fatal to all permanence of political or social connection.

The power held by the crown of appointing for life the members of the legislative council is, if properly regulated under the management of the proposed colonial board, of great benefit to the colony; it stimulates the wealthy and intelligent colonists to distinguish themselves, in order that they may attain the highest rank in their respective countries, and be deemed worthy the approbation of their sovereign. There is thus an honourable emulation kept up, which is of the most essential advantage in every community; for, as it is finely expressed by Sir William Blackstone (and the remark is as applicable to a colony as to the parent state), "The distinction of rank and honour is necessary in every well-governed state, in order to reward such as are eminent for their services to the public, in a manner most desirable to individuals, and yet without burden to the community; exciting thereby an ambitious yet laudable ardour, and generous emulation in others. And emulation, or virtuous ambition, is a spring of action which, however dangerous or invidious in a mere republic, or under a despotic sway, will certainly be

attended with good effects under a free monarchy; where, without destroying its existence, its excesses may be continually restrained by that superior power from which all honour is derived. Such a spirit, when nationally diffused, gives life and vigour to the community; it sets all the wheels of government in motion, which, under a wise regulator, may be directed to any beneficial purpose; and thereby every individual may be made subservient to the public good, while he principally means to promote his own particular views.

"A body of nobility is also more peculiarly necessary in our mixed and compounded constitution, in order to support the rights of both the crown and the people, by forming a barrier to withstand the encroachments of both. It creates and preserves that gradual scale of dignity, which proceeds from the peasant to the prince; rising like a pyramid from a broad foundation, and diminishing to a point as it rises. It is this ascending and contracting proportion that adds stability to any government; for when the departure is sudden from one extreme to the other, we may pronounce that state to be precarious.

"The nobility, therefore, are the pillars which are reared from among the people, more immediately to support the throne; and if that falls, they must be also buried under its ruins. Accordingly, when in the last century the Commons had determined to extirpate monarchy, they also voted the House of Lords to be useless and dangerous. And since titles of nobility are thus expedient in the state, it is also expedient that their owners should form an independent and separate branch of the legislature. If they were confounded with the mass of the people, and, like them, had only a vote in electing representatives, their privileges would soon be borne down and overwhelmed by the popular torrent, which would effectually level all distinctions. It is, therefore, highly necessary that the body of nobles should have a distinct assembly, distinct deliberations, and distinct powers from the commons."*

The bill for the government of the Australian colonies is now (15th March, 1850) before the Imperial Parliament, where it will doubtless receive a fair and full discussion. I have conferred with no member of the legislature thereon; received no private information; and formed my judgment solely from the facts published by parliament; and believing that it is the anxious desire of the queen, of her Majesty's ministers, and of all parties in both the Houses of Lords and Commons, to act with a just and liberal spirit towards the Australian colonies, I can only venture to express an earnest hope, that a measure conducive to the happiness of the colonists, and calculated to maintain their connection with England, may be the result of the deliberations of the Imperial Legislature.

LAWS AND COURTS.—The statute laws of England are in force in the colony, aided by acts of Parliament and local enactments by

* The state of France, in 1850, under a single chamber, is a practical illustration of the dangers attendant on one Legislative Assembly.

the governor and Legislative Council. An Insolvent Debtors' Act is in operation, the benefit of which may be obtained by an insolvent a second or third time, if he pay fifteen shillings in the pound. Any public officer taking advantage of the provisions of the Insolvent Act, is, by an order of the secretary of state, dismissed the service. The execution of the laws devolves upon a supreme court, presided over by a chief and two puisne judges, whose powers are as extensive as those of the courts of King's Bench, Common Pleas, and Exchequer, at Westminster. The supreme court is a court of *oyer and terminer*, and *gaol delivery*; it is also a court of *equity*, with all the power, within its jurisdiction, of the lord high chancellor of England; and it is a court of *admiralty* for criminal offences, within certain limits; it is empowered to grant letters of administration, and it is an insolvent debtors' court. From the supreme court an appeal lies in all actions, when the sum or matter at issue exceeds the value of £500, to the governor or acting governor, who is directed to hold a court of appeals, from which a final appeal lies to the Queen in council. The supreme court is provided with an attorney and solicitor-general. There are 36 barristers, and 144 solicitors practising in the court. The sheriff exercises, by his deputies, the duties of his office over the whole territory. Circuit courts are held in different parts of the colony; they are courts of record, and stand in the same relation to the supreme court as courts of *oyer and terminer*, and of *assize* and *nisi prius*, in England, do to the king's superior courts of record at Westminster. Courts of general and quarter sessions have the same powers as those of England, and while the colony was a penal settlement, they might also take cognizance, in a summary way, of all crimes not punishable by death, committed by convicts whose sentences had not expired, or had not been remitted.

A vice-admiralty court, presided over by the chief justice of the supreme court, takes cognizance of civil cases only, such as seamen's wages, &c. There is an ecclesiastical court for clerical matters; but this court has no jurisdiction in testamentary affairs, the charter of justice having empowered the supreme court to grant letters of administration, and direct the distribution of testators' effects. Courts of requests have been established under authority 9 Geo. IV., c. 83, for summarily determining claims not ex-

ceeding £10 sterling, except the matter in question relates to the title of any lands, tenements, or hereditaments, or to the taking or demanding of any duty payable to her Majesty, or to any fee of office, annual rents, or other such matter, where rights in future would be bound, or to a general right or duty, and to award costs.* The decision of the court is final and summary, as in England. One commissioner, appointed by the crown, presides in all the courts of requests throughout the colony.

Imprisonment for debt was abolished by the Insolvent Act passed in 1844, on the grounds:—1st. That the imprisonment of the debtor gave a vindictive creditor the power of depriving other creditors of their right to benefit by the labour of their debtor; 2nd. That it drove the debtor, however much he might wish to devote his energies to the payment of his obligations, to seek refuge in the insolvent court. By the assent of a majority of the creditors, a debtor under this act may make a voluntary assignment of his property to the trustees appointed by the creditors, provided such assignment be published three times in one of the Sydney newspapers.

In the earlier stages of the colony, criminal juries were formed of naval and military officers, and civil causes were determined by a judge and two sworn assessors. Now juries, selected as in England, sit in all civil and criminal cases. In 1844 a new jury law was passed by the colonial Legislative Council, by which in civil cases there need only be four jurymen; if, after deliberating four hours, they cannot arrive at a unanimous judgment, the opinion of three-fourths may be taken as conclusive; and if, after deliberating twelve hours, the jury of four cannot agree, a new trial must take place. Mr. Baker, a lawyer of the Inner Temple, who visited New South Wales, says that the "Sydney bar is highly respectable in character, and is, certainly, the most numerous, and perhaps, taken as a whole, the best English bar out of England; several of its members earn from £1,000 to £3,000 a-year, or more." Mr. Baker fancied himself "transported to England," on entering the Supreme Court at Sydney, and seeing three judges on the bench, the registrar and other officers at their feet, the attorney-general and solicitor-general in their silk gowns, the crowd of "learned" gentlemen behind them;

* These powers are so laid down by Mr. H. W. Parker, in Mr. Clark's *Summary of Colonial Law*.

all, from the judges downwards, duly wigged and robed, and the attorneys, hardly discernible from amidst the heaps of red and blue bags, and piles of red-tape bundles, in which they delight to bury themselves. Coroners are stationed in different districts, and great attention is rightly paid to this ancient and very important branch of jurisprudence. There are benches of unpaid magistrates at Sydney and in all the principal towns in the colony, aided by civil constables and a mounted police. There are several stipendiary magistrates.

MILITARY DEFENCE.—New South Wales and the other Australian colonies are perfectly defenceless against a foreign enemy; a hostile fleet might enter Sydney Cove, plunder the merchant shipping in the harbour, and lay the capital under contribution, without any effectual resistance being offered, for the few British troops that are in the colony are scattered at different outposts, and there is no militia in existence; and yet at a comparatively small cost, the harbour of Port Jackson, which would hold the entire fleet of England, might be rendered perfectly impregnable, and be made one of the strongest positions in the world. The entrance of Port Jackson is formed by two lofty headlands, distant about one mile and-a-half from each other, and appear like gigantic lock-gates within which the noble haven expands for fifteen miles into numerous coves, where vessels lie as sheltered as if they were in the London Docks. On the north and south heads of Port Jackson, batteries mounted with sixty-eight pounders would effectually command the entrance, across which, in time of war, a chain-boom might be drawn, supported by buoys. Directly in front of the entrance is the elevated George's Head, on which a battery of heavy guns might also be advantageously placed; so that with these three batteries, no hostile ship, even with a leading wind, could enter without being destroyed or disabled. There are several other islets in the harbour where well-constructed fortresses, and a citadel, with a few guns well manned, would tend to the effectual protection of Sydney Cove, and of the city; the few batteries now on either side of the Cove are merely fit for firing salutes. With the sea entrance well defended, it is not likely that any successful attempt could be made for the capture of the city of Sydney, by landing a force on the north-east shores of Botany Bay, as the Australians would be enabled to defend

their country on a line of fifteen miles of broken country, capable of being made very harassing to an enemy. It would be advisable that the colonists should immediately set about the defence of Port Jackson; appropriate annually a moderate sum towards the construction of batteries at the heads; obtain from England heavy-metalled guns, and boom chains of sufficient length. A small battalion of colonial artillery should be organised; and, for this purpose, the queen would probably permit some of the most efficient gunners in the royal artillery to be drafted into the Australian corps. It is also indispensable to the security of the Australian colonies, that a militia law be passed, providing for the embodiment and training of every man between eighteen and forty-five years of age, capable of bearing arms, as is the case in our North American provinces, and other colonies. Canada, Nova Scotia, New Brunswick, Newfoundland, and even Prince Edward Island, have each an effective militia; and, in the event of hostilities with the United States, or any other country, they could bring immediately into the field, fully armed and equipped, at least a quarter of a million of trained soldiery. New South Wales, and the other Australian colonies, under their new constitution, will possess full control over their own revenue and expenditure; and they cannot expect the people of England to pay, out of the exchequer of this heavily-taxed country, for their fortifications and military defence. In time of war, England would, without doubt, send her fleets and troops to every part of this wide-spread empire; but her best defence must be the patriotism and bravery of the colonists themselves. During the American war of 1811-12, the French and English Canadian militia successfully resisted the American troops of the line; and but for the gallant conduct of that loyal body of British subjects, the regular regiments of our soldiery would have been inadequate to the defence of Canada. Thus must it be with the Australian colonists. The Imperial Parliament is granting them perfectly free institutions; and one of its necessary conditions must be, the providing adequately for their own defence against aggression. The number of her Majesty's troops in the several settlements in Australia, in Van Diemen's Island, and in New Zealand, is stated to be about 2,500; but, of these, nearly a moiety are stationed at New Zealand, in consequence of the recent hosti-

lities between the British and the aborigines; and a large number are employed at Van Diemen's Island, in guarding the convicts sent from England; it is unfair, therefore, to speak of New South Wales being a heavy charge to the crown for military protection; the colonists are quite able to provide their own internal police, and do not require British soldiers for that purpose. As regards Victoria or Port Phillip—Melbourne, the capital, and the harbour of Geelong, have not a single gun for their protection; Southern and Western Australia, and Van Diemen's Island, are also without defensive batteries or militia; and no time should be lost by the colonists in placing their territories in a state capable, at least, of some protection; for it is impossible to say, in the present anomalous state of Europe, how long England, or any other country, may enjoy the blessings of peace. For myself, I hate war; it engenders every bad passion in human nature; and is, consequently, repugnant to the first principles of Christianity, while, in a mere economical sense, it dissipates wealth, destroys industry, and converts men into mere machines for the slaughter of each other; but my own limited experience in the naval and military service of the crown, has taught me to estimate the value of an effective national defence, as being, under Providence, the best security for peace. The nation that would preserve its independence, in the present imperfect state of practical Christianity, must maintain a standing army and a fleet afloat; and this necessity will continue until the day arrive, when "nation shall no longer rise up against nation, neither shall they learn war any more." Then, indeed, may we "turn our swords into pruning-hooks;" but, until then, we must keep them in readiness, though the less they are used the better.

The number of troops of the line in New South Wales and Port Phillip, in December, 1848, was—field-officers, 6; officers, 42; non-commissioned officers and privates, 908 = 1,046. The troops are widely scattered, viz.—at Sydney, and in the forts in Harbour City, 706; Fort Macquarie, 12; Goat Island, 13; Cockatoo Island, 58; Paramatta (15 miles from Sydney), 29; Blackheath (66 miles), 48; Newcastle (75 miles), 28; Moreton Bay (450 miles), 34; Port Phillip (600 miles), 58; attached to mounted police, 20. The mounted police consists of 6 officers; 18 serjeants; 13 corporals; troopers, 74 mounted; 19 dismounted = 130.

CHAPTER VI.

REVENUE AND EXPENDITURE OF NEW SOUTH WALES, MONETARY STATE, &c.

For several years, the expenditure required for the maintenance of New South Wales, as a penal settlement, was borne chiefly by the British exchequer. The committee of the House of Commons, which sat in 1837-38, on transportation, referring to the cost of New South Wales and of Van Diemen's Island, as penal settlements, adduce the following statement:—

“It has been impossible for your committee to obtain an accurate statement of the total amount of British funds expended on the two penal colonies since their foundation, as the accounts have hitherto been kept principally with a view to their examination and audit, and not framed so as to afford the statistical information required. The sum really expended on account of the penal colonies, exceeds the subjoined estimate, which, however, may be considered sufficiently to approximate to the true amount, to give the house an idea of what has been the cost of the punishment of transportation:—

Cost of the transport of convicts . . .	£2,729,790
Disbursements for general, convict, and colonial services	4,091,581
Military expenditure	1,632,302
Ordnance	29,846

Total from 1786 to 31st March, 1837, 8,483,519
Deduct premium on Bills, Coins, &c., 507,195

£7,976,324

“The number of convicts transported to New South Wales and Van Diemen's Land up to the end of the year 1836, were 96,558; their conveyance to those colonies has, therefore, cost about £28 per head on the average; and the various expenses consequent upon their residence and punishment there has been at least £54 a head, in all more than £82 a head, how much more it is impossible for your committee to ascertain.

“The expense entailed upon this country by the penal colonies, has been, on the average since their commencement, £156,398 a year; but at present the annual expenditure is more than treble that amount, and is rapidly increasing every year. That expenditure can now be ascertained with considerable accuracy, as the commissariat accounts have been kept in an improved form since 1832. It should be remarked that the estimates for the penal colonies are not voted in one sum, but are scattered through various portions of the general estimates; for instance, the transport of convicts is defrayed out of the navy estimates; the pay of troops, out of the army estimates; the maintenance, &c., out of the miscellaneous estimates; the various dry stores required, out of the ordnance estimates, and innumerable sundries are paid out of the army extraordinaries.

“The following was the expenditure of this country on account of New South Wales and Van Diemen's Land in the years 1836-37:—

NEW SOUTH WALES:—

Ordinaries of the army	£46,801
Commissariat	3,450
Ordnance	12,014
Navy	4,641
Extraordinaries of the army	55,625
Special disbursements for convicts	127,949

VAN DIEMEN'S LAND:—

Ordinaries of the army	16,354
Commissariat	2,059
Ordnance	11,625
Navy	515
Extraordinaries of the army	20,867
Special disbursements for convicts	113,083
Transport of convicts	73,030

Total expenditure £488,013

“In 1836 the number of convicts in the two colonies amounted to above 60,000, and in that year the cost to this country was little more than £6 : 16s. a head; in the same year about 5,475 persons were transported at the expense of about £13 : 6s. a head. In these estimates of the expense of the system of transportation, neither the cost of the convict establishment at Bermuda, nor of the hulks at home, are included.”

It is evident, from the foregoing statement, that without reference to the moral part of the question of transportation, it is the cheapest mode of disposing of our criminals. Including all the heavy charges from 1787 to the close of the war in 1815, it appears that about 100,000 convicts have cost less than £8,000,000, or £80 each. Taking the average period of sentence at ten years for each prisoner, this shews a charge of about £8 a year for each convict, and during the year 1836, it was only £6 : 16s. Under the most economical management, a convict costs, in the Milbank Penitentiary, England, all things included, £25 a year; four times what he would cost the state, if a proper system of penal colonization were carried into effect; and the details in this volume prove the great amount of moral reformation which has taken place in New South Wales. The retention, in the United Kingdom, of 5,000 convicts a-year, would soon prove a heavy charge on the home exchequer; and when the period of their imprisonment is fulfilled, what is to become of them? The most humane and Christian policy is the foundation of settlements like that of New South Wales.

REVENUE.—It is unnecessary to enter into details of the early collections of revenue

in the colony. The limited number of free inhabitants, the few exportable products they possessed for several years, and the disinclination of the home government to press heavily on the colonists, prevented any endeavour to levy a large income for even their local government. The following statement of the revenue of the colony of New South Wales, from 1824 to 1848, is given in detail in a Parliamentary paper of 27th August, 1839, and subsequently from various returns. (It includes Port Phillip)—

Year.	General Revenue.	From Land.	Total.
1824	£49,191	£279	£49,471
1825	65,733	5,948	71,681
1826	69,478	2,742	72,220
1827	75,495	2,814	79,309
1828	91,306	5,437	96,743
1829	99,475	3,309	102,784
1830	102,743	1,985	104,729
1831	117,447	3,617	121,065
1832	122,163	13,683	135,847
1833	138,469	26,272	164,741
1834	161,960	43,482	205,442
1835	184,268	89,380	273,648
1836	198,129	132,396	330,526
1837	226,900	127,866	354,766
1838	220,780	125,729	346,509
1839	252,996	172,273	425,269
1840	332,332	354,060	686,392
1841	370,273	117,120	487,393
1842	371,937	63,149	435,086
1843	322,388	47,742	370,130
1844	274,185	44,524	318,709
1845	288,788	69,557	357,345
1846	270,550	76,271	346,821
1847	275,543	122,843	398,386
1848	295,566	105,281	400,847

The general revenue included duties on spirits imported or distilled in the colony; on tobacco imported; five per cent., *ad valorem*, on goods imported; fees, fines, licences, and other miscellaneous items. The total sum collected during the fourteen years ending 1837, on these branches of taxation, was £1,702,762. Of this, the *spirits imported* yielded £1,051,624; spirits distilled in colony, £15,364. Tobacco, £133,778; malt and spirit retail licences, £90,770; five per cent. custom duties, £79,535; fees of public officers, £74,296; proceeds of sales of different things, £48,652; tolls, ferries, and markets, £40,042; post-office collections (from 1828), £29,988; wharfage dues, £27,581; auction duties, £25,410. The other items were under £20,000. The total income derived from land, during the same period, was £460,217; of this, £428,936 were the proceeds of land sold, and £13,150 quit-rents. The amount of land sold in the first year of the period, was

£279; in the last year, £120,427. This statement shows a heavy taxation.

The details of fixed revenue of New South Wales (not including Port Phillip) for the year 1847-48, are thus shown:—

Items.	1847.	1848.
DUTIES:—		
On spirits imported . . .	£58,715	£63,851
Ditto, distilled in colony . .	14,091	9,231
Tobacco, imported . . .	38,915	36,089
<i>Ad val.</i> on goods imported . .	26,956	18,985
Tonnage on shipping in sup- port of water police . . }	627	695
Wharfage	1,339	1,165
DUES:—		
Entrance and clearance of vessels }	696	807
Light house	709	890
Harbour	681	742
Post office collections	14,103	14,458
Auction duty	4,834	3,249
LICENCES:—		
Auctioneers*	433	587
Retail spirits, &c.	20,615	22,999
Night and day billiard tables .	2,110	2,440
Distillers' and rectifiers' . .	75	75
Hawkers' and pedlars' . . .	241	264
Rent of tolls and ferries . . .	5,331	3,972
Assessment on live stock be- yond Settled Districts* . . }	1,127	14,095
Fees in public offices	9,631	9,730
Fines of courts of justice, &c. .	1,510	2,505
Incidental	4,921	2,681
Ditto	751	4,176
TERRITORIAL OR CROWN:—		
Sale of crown lands, and town allotments, &c. }	8,129	7,036
Quit Rents	824	4,277
Redemption of ditto	13,914	147
Licences for depasturing stock <i>within</i> Settled Districts. . }	2,836	1,166
Ditto <i>beyond</i> ditto	23,821	26,490
To cut timber on crown lands .	218	344
Rent of quarries	5	10
Rent of government build- ings and premises . . . }	91	140
Collections for church and school estates }	4,682	4,116
Other territorial sources . . .	249	35
Special receipts and surcharges.	1,640	2
Total revenue and receipts	264,820	267,449

The territorial revenue for 1848, in the colony, including New South Wales and Port Phillip, was £103,284; and the total revenue and receipts for the same year, of the territorial and general taxation and assessments, &c., was £401,850.

* The assessment on stock depastured on crown lands, beyond the settled districts of New South Wales: annually was—every horse, 3*d.*; head of horned cattle, 1½*d.*; each sheep, ½*d.* Pending the issue of licenses, under her Majesty's order in council of 9th March, 1847, £10 for 4,000 sheep and forty head of cattle, and a proportionate increase for larger numbers. (See next page for other sources of revenue.)

566 DETAILS OF EXPENDITURE IN NEW SOUTH WALES, 1847-8.

The expenditure in detail of New South Wales alone, exclusive of Port Phillip, was—

Items.	1847.	1848.
CIVIL :—		
Governor and establishment .	£5,561	£5,645
Executive Council	488	582
Legislative Council	3,327	2,657
Col. Secretary's department .	6,098	6,534
Registrar-General's "	970	1,007
Col. Treasurer's "	3,633	3,814
Auditor-General's "	2,802	2,999
Customs' "	11,066	10,747
Chief Ins. of Distilleries "	1,525	1,605
Post Office "	12,194	14,707
Post Master's "	3,212	4,369
Col. Architect's "	1,309	1,269
Col. Storekeeper's "	859	1,120
Botanic Garden "	528	891
Government Printer's "	1,546	2,002
Total	55,123	35,593
JUDICIAL :—		
Supreme Court department .	8,729	8,995
Crown Law Officers' "	3,520	3,243
Insolvent Estates "	444	506
Courts of Qr. Sessions "	2,193	2,223
" of Requests "	2,096	2,270
Sheriffs' "	2,788	2,829
Coroners' "	1,706	1,997
Total	21,480	22,067
POLICE* :—		
Sydney City police	7,769	7,464
" Water "	1,182	1,432
Within settled Districts	21,387	21,229
Beyond the settled Districts .	5,067	8,365
Mounted police	10,942	9,177
Border "	1,376	—
Native "	—	227
Total	47,725	47,897
GAOLS :—		
Sydney	£3,180	£3,466
Country districts	4,336	4,246
Total	7,516	7,713
MEDICAL :—		
Health Officer and Med. Board .	326	325
Lunatic Asylum	3,044	3,794
Total	3,370	4,119
CLERGY AND CHURCHES :—		
Ch. of England established .	14,401	14,114
Ditto building churches, &c. .	3,411	3,015
Presbyterian established . .	2,101	2,127
Ditto building churches . .	182	400
Wesleyan established	800	662
Roman Catholic established .	5,536	5,780
Ditto building chapels . . .	1,812	3,088
Total	28,244	29,188

* There are 32 police districts in New South Wales. The police are in number 361. The average expense for this protection, to each inhabitant, is under 4s. per head.

Items.	1847.	1848.
SCHOOLS :—		
Protestant Male Orphan . . .	1,471	1,489
" Female Orphan	1,268	1,603
Church of England Public . .	4,032	3,991
Presbyterian "	1,921	1,736
Wesleyan "	549	570
R. Cath. { Institution for Des- }	1,168	1,264
{ titute Children }	1,846	1,784
Denominational School Board .	—	137
National " "	—	4
Total	12,258	12,582
MISCELLANEOUS.		
Pensions paid in the colony .	576	593
Public Institutions :—		
Support and medical treat- }	548	903
ment of free paupers		
In aid of Sydney Dispensary .	627	763
Hospital, Paramatta	—	37
" Windsor	141	174
" Goulbourn	208	198
" Bathurst	139	69
" Maitland	188	234
Mechanics' School of Arts . .	200	200
Colonial Museum	300	300
Vaccination	75	100
Public buildings and works . .	31,781	33,755
Witnesses Supreme Court . . .	1,806	2,210
" Quarter Sessions	903	1,213
Travelling expenses, judges, &c.	850	802
Advances to Col. Agent General	16,085	17,886
" towards new Mil. Barracks .	8,250	—
" on account Gov. New Zealand	153	2,304
" South Australia	—	299
" Van Diemen's Island	—	50
" Madras	—	36
Revenue and receipts returned .	3,282	3,723
All other disbursements	2,352	2,347
Total	68,473	68,196
Arrears of previous years . . .	349	917
Gross total, Sydney district .	244,541	252,638

Licences.—Annual: auctioneers, for all the colony, £15; for a police district, only £2; publicans, general, £30; wine and beer only, £10; billiard table, £10; to keep open after nine o'clock at night, £10; packet licence, for wines, &c., £2; confectioners, for ginger and spruce beer, £1, distilling, £50; rectifying and compounding, £25; hawkers and pedlars, £1; stage carriage, 5s.; carters, 2s. 6d.; porters and boatmen, 5s. each.

To cut timber on vacant crown lands, annually, £2, except cedar, which is £4.

The tolls and ferries in the colony are numerous, and the rates levied about the same as in England. The rate of customs duties is stated under *Commerce*. There is an extensive list of fees, which are exacted in

the different public offices in the colony, civil and ecclesiastical, and carried to the credit of the public revenue.

Auction duty.—Ten shillings on every hundred pounds sterling of the purchase-money.

Postage of letters.—Weighing less than half-an-ounce, not exceeding fifteen miles, 4*d.*; twenty, 5*d.*; thirty, 6*d.*; fifty, 7*d.*; eighty, 8*d.*; one hundred and twenty, 9*d.*; one hundred and seventy, 10*d.*; two hundred and thirty, 11*d.*; three hundred, 1*s.*; for every hundred miles above three hundred, 1*d.* By sea, from one part to another of the colony, 4*d.*; colonial newspapers, within the colony, for seven days, transmitted once as a single letter. Ship letters, for receipt or despatch, in addition to inland postage, 3*d.*, 6*d.*, 9*d.*, or 1*s.*, quadruple.

Total—in	1847.	1848.
Expenses	£558,891	£583,088
Revenue and receipts . .	534,594	551,246

The commissariat department in N.S.W.		
Paid for Military service in 1848	£45,326	
„ Ordnance ditto	10,783	
Total military service	£70,716	

Convict service	14,651
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Not connected with the colony:—

Army, pensions, &c.	£8,608
Commissariat, pay and pension	625
Navy	10,224
Van Diemen's Island	32,506
New Zealand	83,776
North Australia	2,490
East India Company, advances to . . .	142
Excise	9
Irish government, police, pensions . . .	111

Total, not connected with the colony, £138,491

The expenses on account of 4,015 convicts in New South Wales, defrayed from the military chest, was £14,651.

In September, 1849, the governor of New South Wales had remitted to the lords of her Majesty's treasury £180,000, to pay the passage of emigrants from the United Kingdom during the year 1847–8. Of this sum, £100,000 was authorized to be raised in the colony, by the issue of debentures, secured on the territorial revenue of the colony. The debentures were issued in sums of £100 each, bearing interest at the rate of 3½*d.* per diem, or £4 18*s.* 10½*d.* per cent. per annum. They would be received as cash in payment for crown lands, but otherwise be redeemable at par within three years, at the option of the government, or within five years, at the option of the holder of a debenture.

The sums paid from the colonial treasury of New South Wales on account of immigration and quarantine, from 1832 to 1847, have been very large:—

—	1832—47.	1848.	Total.
Immigrants brought into the colony	£974,970	£105,026	£1,079,996
Passages of clergymen, missionaries, and others	11,760	—	11,760
Superintendence, maintenance, lodging, &c., after arrival in colony . . .	35,746	4,145	39,892
Quarantine	23,068	793	23,861
Total	1,045,544	109,965	1,155,510

This statement does not include the sum of £25,684, paid as interest on land and immigration debentures, issued to the extent of £149,700, of which the whole has been paid off.

BANKING.—Monetary system.—Previous to 1817, the circulating medium of the colony consisted principally of the private notes of merchants, traders, shopkeepers, and publicans, the amount being sometimes so low as sixpence. To remedy the evils attendant on such a state of things, the bank of New South Wales was, in 1817, incorporated by a charter under the seal of the colony, with a capital stock of £20,000 sterling, raised in shares of £100 each. The amount of shares subscribed was £12,600, and notes were issued by the bank for 2*s.* 6*d.*, 5*s.*, 10*s.*, £1, and £5. In the first year of its incorporation, the bills discounted by the bank amounted to only £12,193; in 1818 they rose to £81,672; in 1819 to £107,256; demonstrating the necessity that had existed for such an establishment, and the advantage and convenience that was found to result from it. Interest was not uncommon at the rate of ten per cent. per annum. The dividends declared in 1818 were at the rate of twelve per cent.; for 1819, twenty-one per cent.; for 1820 and 1821, twelve per cent.; and for 1822, fifteen per cent. The charter was granted for seven years, which was of course renewed. Each shareholder was responsible for the whole of the proceedings of the bank, thus giving greater stability to the institution, and securing a more careful management of its transactions. The bank seldom advances money upon real securities of any description, nor does it grant cash credits, or allow any interest upon current accounts, or permanent lodgments of cash. The capital of the bank of New South Wales was originally about £150,000, di-

vided into 1,500 shares of £100 each, and the amount of capital paid up about £35,000. The affairs of the institution are managed by a president and eleven directors, elected by the shareholders. Every £50 paid up gives a vote. In examining the proceedings of the bank in 1836, I noticed a remarkable fact, namely—that the establishment has never sustained any actual losses through the non-payment of the paper which it has discounted. Whether it has since sustained any losses, I am unable to say. Up to the year 1824, the bank discounted at the rate of eight per cent., after which the rate of discount was increased to ten per cent. The colonial government pays and receives in specie only; and in consequence of its receipts, from the customs, duties, sales, and leases of land, and other sources of revenue, having considerably exceeded the amount of its disbursements, it has frequently withdrawn from circulation nearly all the specie in the colony. In consequence of this, and the remittances occasionally made of specie to Canton and other places, with which a trade is carried on by the colonists, the bank of New South Wales, though far more than solvent, has more than once been under the necessity of suspending the payment of specie on demand. It is a fact, highly creditable to the bank and to the colonists in general, that when, owing to the severe drought during the panic which occurred in 1826, and which continued for three years with little intermission, there were bills to the amount of £18,000 over-due to the bank, while the whole capital did not, at that time, exceed £22,000. The confidence of the public was so great, that, by prudent management, not a sixpence of the over-due bills was lost, and the bank continued to pay a dividend all the time of from fifteen to twenty per cent. The reliance of the colonists on the stability and integrity of the establishment was so entire, that instead of any run being occasioned on the bank, the inhabitants, on the contrary, with one accord, poured into its coffers all the specie they could collect, and, by refraining from demanding it as much as possible, soon enabled the directors to resume cash payments. The bank issues notes from £1 to £20 and upwards. The capital at present paid up is about £125,000.

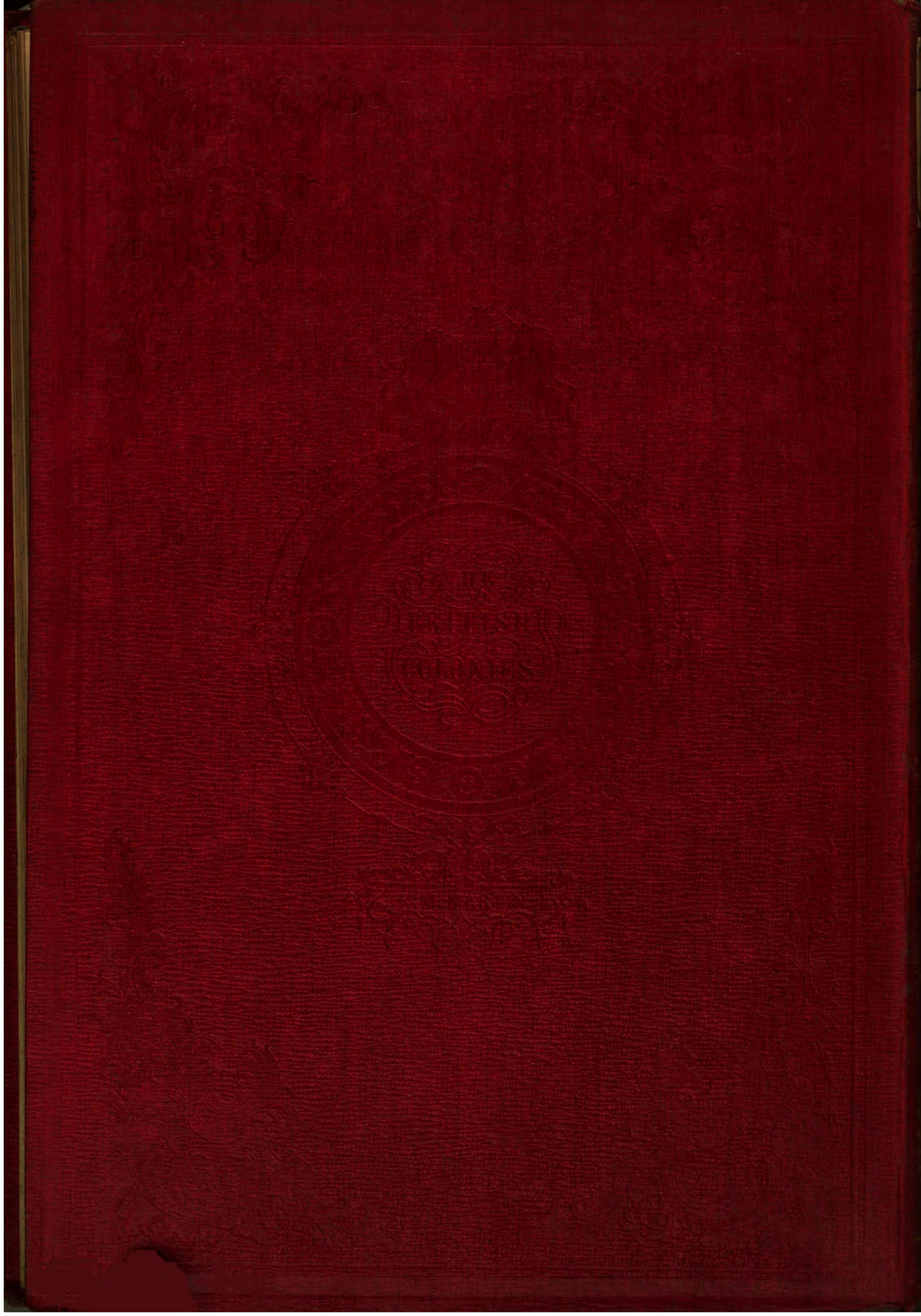
In 1836, a second bank was established at Sydney, termed the *Bank of Australia*, with a capital of £220,000. The *Bank of*

New South Wales was established, and largely supported by the emancipists; and the *Bank of Australia* by those colonists who arrived free in the country, and who acquired the title of exclusionists. For some years this new institution was highly prosperous, and it seemed to be a powerful rival to the other establishment. The yearly dividend varied from twelve to fifteen and twenty per cent.; but, in the disastrous period of 1842–3, the *Bank of Australia* became deeply involved, and largely indebted to the metropolitan *Bank of Australasia*: it has, consequently, become necessary, together with the *Sydney Bank*, to wind up affairs.

In May, 1835, a London company was incorporated by royal charter, and called the *Bank of Australasia*, with a large capital, for the purpose of establishing banks of issue and deposit in New South Wales, Van Diemen's Land, and other settlements in Australasia. One-half of the company's then capital (£200,000) was required to be paid up before the commencement of business, and the entire capital within two years. The stock was divided into 5,000 shares of £40 each (500 of which were reserved for allotment in the colonies), to be paid up as follows:—£10 per share at the time of subscribing; £7 at three months from that date; £6 at six months; £3 at nine months; £4 at twelve months; £5 at fifteen months; and £5 at eighteen months. The management of the company's affairs is vested in the London board of directors, appointed by the proprietors; and the banks in the colonies are conducted by local directors, and other persons duly qualified, appointed by the London directors. The paid up capital of this bank is now £900,000. Its manager in New South Wales unfortunately allowed the *Bank of Australia* to become largely indebted to its Sydney branch, and, for some time, no dividend has been declared. The verdict of the courts of law in England has established the validity of its claims on the *Bank of Australia*. The prosperity of the colony is reviving; and it is probable the shareholders will soon be in the periodical receipt of a fair dividend. This establishment has branches in New South Wales, Port Phillip, South Australia, and Van Diemen's Island.

The *Union Bank of Australia* was established in London in 1837, with a capital of £1,000,000. The institution was at once so favourably viewed, that the whole of its shares were taken as soon as issued, without





Martin, Robert Montgomery,

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